

#### Degree Programs in Counseling Psychology, Rehabilitation, and Special Education

MASTER OF SCIENCE IN COUNSELING PSYCHOLOGY (MS)

MASTER OF SCIENCE IN EDUCATION (MSED)

Intensive Special Needs

Special Needs

MASTER OF SCIENCE (MS)

Applied Behavior Analysis

College Student Development and Counseling

Human Resource Counseling

Applied Educational Psychology

School Counseling

School Psychology

Rehabilitation Counseling

CERTIFICATE OF ADVANCED GRADUATE STUDY (CAGS)

School Psychology

Counseling Psychology

DOCTOR OF PHILOSOPHY (PHD)

School and Counseling Psychology Doctoral Program

The Counseling Psychology, Rehabilitation, and Special Education Graduate Bulletin should be used in conjunction with the Undergraduate Catalog, Undergraduate and Graduate Student Handbook, Cooperative Education Handbook, and other procedural guides that contain Northeastern University's primary statements about academic programs, policies, and procedures; degree requirements; student responsibilities; student academic and co-curricular life; faculty rights and responsibilities; and general personnel policies, benefits, and services.

#### **Bouvé College of Pharmacy and Health Sciences**

Bouvé College of Pharmacy and Health Sciences combines two different academic traditions: a rich variety of mental and physical health-oriented professions and a strong group of basic science-oriented degrees. The fertile interplay between basic and applied science allows students to become acquainted with a wide range of health professions and areas of health research. The College offers twenty-four programs which represent a wide spectrum of mental and physical health professions and biomedical sciences.

The general regulations and minimum requirements for all graduate programs are established by the University Graduate Council. In some matters the committee of each graduate school is allowed discretion to establish its own regulations within limits defined by the council. The regulations and academic requirements that follow have been formulated in accordance with general policy. Please consult specific program descriptions for additional requirements.

#### Mission Statement of the College

The Bouvé College of Pharmacy and Health Sciences is uniquely positioned to utilize its diverse health programs and expertise in experiential education to respond to the changing health care needs of America and the world through excellence in education, research, and community involvement. This mission is expressed in undergraduate and graduate degree and certificate programs in the health sciences, education, and related services that:

- afford the development of required competence in the practice of the profession, including professional knowledge and skills, social and cultural understanding, ethical behavior, research/scholarship, and leadership/ management skills;
- promote continued professional development in a rapidly changing environment;
- facilitate interdisciplinary majors, scholarships, and integrated health courses, both within the college and among colleges in the university;
- promote an awareness among the faculty, students, and alumni of global health issues and related service needs;
- foster an atmosphere that attracts and retains students, faculty, and clients of diverse social, cultural and ethnic backgrounds;
- prepare graduates to deal with the health needs of the University's inner-city neighbors;
- recognize the important contributions made by both the clinical and basic science faculty;
- utilize innovative teaching strategies such as case studies, CAI, and Problem-based Learning in both undergraduate and graduate courses;
- meet the physical and wellness needs of students on campus by fostering skills and knowledge associated with health-related fitness and motor skill acquisition;
- exert an influence on the external health care community.

#### Accreditation

Northeastern University is accredited by the New England Association of Schools and Colleges, Inc.

Bouvé College of Pharmacy and Health Sciences Graduate School Northeastern University

# **Course Descriptions**

# **Programs:**

Biomedical Sciences
Health Professions
Medical Laboratory Science
Medicinal Chemistry
Pharmaceutics
Pharmacology
Toxicology

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#### INTERDISCIPLINARY COURSES

# INT 3101 Blochemistry 1

2QH

Offers a description of the biochemical components of the cell, including carbohydrates, lipids, prostaglandins, steroid hormones, amino acids, polypeptides, proteins, purines, pyrimidines, nucleosides, nucleic acids, and vitamins. Considers buffers, the Henderson-Hasselbalch equation, and the importance of pKa. <u>Prereq. One year of organic chemistry</u>.

## INT 3102 Biochemistry 2

2QH

Discusses enzymes; enzyme kinetics; the mechanisms of enzyme reactions, of intermediary metabolism and of biological oxidation-reduction reactions; bioenergetics; and the electron transport chain. Considers carbohydrate metabolism, including the glycolytic pathway, the citric acid cycle, and the pentose phosphate pathway. <a href="Perception-Precedulation-Precedul

## INT 3103 Biochemistry 3

2QH

Presents lipid metabolism, including the fatty acid cycle, the biosynthesis of fatty acids, and the biological formation of the prostaglandins, cholesterol, and steroid hormones. Studies the metabolism of the various amino acids, including the area cycle, one-carbon fragments, transamination reactions, and aromatic hydroxylations. Discusses the metabolism of nucleic acids and their building blocks, as well as the genetic basis of protein synthesis, the genetic code, and the mechanisms of control. <a href="Preseq">Preseq</a>. INT 3102.

# INT 3201 Applications of Mass Spectrometry

2QH

Examines the principles governing the fragmentation and ionization of organic molecules, the interpretation of mass spectra, and applications of mass spectrometry to the solution of selected problems in the fields of chemistry, biochemistry, and the forensic sciences. <a href="Prereq">Prereq</a>. One year of organic chemistry, basic physics, and physical organic chemistry desirable but not essential.

#### **HEALTH PROFESSIONS**

# MHP 3101 Health Care Delivery

3QH

Explores the principal components of the health care delivery system, with an emphasis on its social, political, and economic evolution and development. Discusses future trends and their implications.

MHP 3102 Health Research Methodology

Covers aspects of experimental design and hypothesis testing. Uses the critical reading of clinical trials, cohort and retrospective studies, and health services research articles to illustrate principles of research design and conduct. Requires students to complete a research protocol. Prereg. MHP 3101.

MHP 3103 Professional Dynamics in Health Care 3QH Examines skills and techniques used in developing leadership attributes, creating change, and working effectively with individuals and groups in the health care environment. Emphasizes various successful approaches for both leadership and interaction in ambulatory, institutional, professional, legislative, and regulatory health care settings. <a href="Perequents-Prefeq">Prereq</a>. <a href="MHP 3101">MHP 3101</a> and MHP 3102.

MHP 3111 Operations Management in Health Care
Studies the application of systems analysis to health care institutions, with particular attention to concepts for the management of ancillary services departments. Uses case studies to analyze work sampling, work flow, systems design, materials management, supply utilization, human resource management, and productivity improvements. Requires course project.

MHP 3112 Financial Analysis in Health Care

Focuses on the application of financial analytic principles to health care institutions, with particular attention to concepts for the management of ancillary services departments. Uses case studies and hospital financial reports to develop such techniques as cost accounting and budgeting. Emphasizes the practical use of financial techniques for analyzing alternatives and decision making, as well as functional knowledge of financial management in health care. <a href="Prereq">Prereq</a>. MHP 3111.

MHP 3200 Fundamentals of Regulatory Risk Assessment 3QH Applies toxicologic, statistical, and pharmacokinetic principles to assessment of the impact on health of hazardous exposure to chemical carcinogens and noncarcinogens found in the environment. Focuses on

mathematical methods for quantitative risk assessment, exposure assessment, and risk characterization. Includes lab exercises and term paper assignments for in-depth review of the key processes in risk assessment. Uses as examples major risk assessments such as dioxin, ozone, benzene, and ethylene dibromide.

#### MHP 3201 Biometrics

2QH

Explores the fundamental principles of experimental design and statistical analysis, emphasizing biomedical research. Includes such topics as descriptive statistics, hypothesis testing, correlation, regression, and the chi-square test.

### MHP 3221 Health Science Education 1

3QH

Offers an overview of various aspects of education in the health-related professions, including design and use of behavioral objectives, evaluation tools (both clinical and didactic), and a survey of various teaching methods. Discusses current journal literature.

#### MHP 3222 Health Science Education 2

3QH

Examines various packages of self-instructional aids. Expects each student, with the aid of lecture material and independent assignments, to design and produce a fifteen-minute autotutorial and present it to the class for critique. Discusses current journal literature..

MHP 3401 Health Policy Analysis and Evaluation 3QH Presents the application of analytic techniques (for example, decision, benefit-cost, and cost-effectiveness analyses) to the forming, implementing, and evaluating of health policies and health care programs. Analysis of past and present studies in the allocation of health care resources will examine the analytic as well as the political basis for decisions. Includes student critique of published case analyses in class. Requires written analysis of a future proposal or current program. Prereq. MHP 3101and MHP 3102, or equivalent.

MHP 3402, MHP 3403, MHP 3404 Health Policy Seminar 1,2,3 1QH each

Analyzes a selected topic from health policy literature. Students will be expected to evaluate and critique published articles and lead a seminar session. Prereq. MHP 3101 and MHP 3102.

MHP 3405 Clinical Effectiveness and Outcome Assessmer®QH Presents expanded view of clinical outcome assessment, requiring that more than a physiologic response be measured when determining the clinical effectiveness of health care programs and treatments. Examines the multidimensional concept of quality of life measures, including individual patient utility assessments, other methods of patient preference expression, general and disease specific health status indices, and functional status assessments. Considers the psychometric characteristics and clinical practicality of various assessment methods. Analyzes major outcome studies such as the Medical Outcome Study (MOS).

#### MHP 3801 MHP Thesis

2QH

Student may register three times for a total of 6 quarter hours of credit. Prereq. Written permission of advisor.

## MHP 3802 MHP Research Report

2QH

Student may register for this course three times for a total of 6 quarter hours of credit. <u>Prereq. Written permission of advisor.</u>

# MHP 3810 MHP Directed Study

3QH

Offers directed research in health studies under the direction of a faculty member. Prereq. Written permission of advisor.

#### MEDICAL LABORATORY SCIENCE

MLS 3302, MLS 3303 Pathophysiology 1,2

Considers disease processes as appropriate and inappropriate variants of normal physiological functions. Examines certain important and illustrative diseases rather than surveying or cataloguing of diseases in general. Prereq. Mammalian physiology; knowledge of biochemistry is desirable but not essential.

MLS 3304 Cellular Pathology 3QH Considers cellular changes associated with injury, aging, apoptosis, and oncogenesis. Explores interactions of normal and pathologic cells in inflammation, hyperproliferative diseases, and malignancies, with emphasis on the relevance of those interactions to disease progression. Prereq. Chemistry, biology: biochemistry and cell biology are desirable.

MLS 3310 Principles of Medical Endocrinology 2QH Studies endocrine-related clinical abnormalities, emphasizing the relationship of clinical lab measurement to biochemical dysfunctions of the endocrine system. <a href="Pereq">Prereq</a>. Biochemistry.

MLS 3313 AIDS

Offers an exploration of clinical, immunological, serological, epidemiological, and social facets of AIDS. Includes an introductory exposition of the present state of the disease and several sessions spent critically dissecting the pertinent literature.

MLS 3321 Hematology 1: Disorders of the Erythrocytes 2QH Examines the physiology and pathology of red blood cells and hemoglobin. Prereq. Some knowledge of basic hematology is essential, and familiarity with general mammalian biochemistry is strongly recommended.

MLS 3322 Hematology 2: Disorders of the Leukocytes 2QH Explores the pathophysiology of white cell disorders. Discusses clinical and lab correlations of leukemias; myeloproliferative and lymphoproliferative disorders; infections; and inherited leukocyte anomalies. Prereq. Undergraduate biochemistry.

MLS 3323 Hematology 3: Hemostasis

2 QH

Presents clinical and lab correlations of hemostatic disorders. Covers material from the basic to the most recent experimentation, technical, and clinical applications. <u>Prereq. Undergraduate biochemistry</u>, hematology course, or equivalent experience.

MLS 3338 Immunobiology

2QH

Presents topics of current interest in immunobiology, such as cell interactions in the immune response, the major histocompatibility complex, antibody structure and function, and the regulation of the immune response. <u>Prereq. Permission of instructor.</u>

MLS 3339 Immunopathology

2QH

Presents the basic elements of immunopathology, reviewing the components and function of the immune system. Covers the disorders of the complement system, the biologic mechanisms of immunologically induced tissue injury (hypersensitivity reactions), autoimmunity, and immunodeficiency. Considers the immunological features of cancer and transplant rejection. <u>Prereq. MLS 3338.</u>

MLS 3341 Medical Bacteriology

3QH

Focuses on those aspects of microbial pathogenesis that are of significance in understanding the interactions among infecting organisms, the host and host, defenses as they relate to epidemiology, symptoms, diagnosis, progression, and chemotherapy of bacterial disease. Prereq. Undergraduate medical microbiology.

MLS 3342 Current Topics in Microbiology

3QH

Emphasizes current topics in infectious diseases. Discusses topics in microbiology that are of medical and epidemiological interest during the time the course is being offered. <u>Prereq. Undergraduate microbiology and immunology.</u>

MLS 3343 Medical Virology

3QH

Surveys medically important virus groups. Discusses viral replication, interactions with human hosts, and the diagnosis and therapy of viral diseases. <u>Prereq. Undergraduate microbiology and immunology.</u>

MLS 3345 Epidemiology

2QH

Studies the basic concepts of epidemiology, causes of disease, factors contributed by agents, the human host, and the environment. Examines the acquisition and evaluation of data, as well as the relationship of person, time, and place. Reviews case studies and problems, including diet and

cancer, causes of heart disease, and a review of the AIDS epidemic.

Prereq. Permission of instructor.

Presents the basic concepts in lab investigations; diagnostic enzymology, immunology, and clinical toxicology; organ system diseases; metabolic diseases; and special topics such as pediatric clinical biochemistry and cancer-associated biochemical abnormalities. Prereq. INT 3101, INT 3102, INT 3103, undergraduate clinical chemistry, analytical and organic chemistry, and medical physiology.

MLS 3352 Clinical Chemistry Techniques and Instrumentation 2QH

Discusses the current analytical techniques and instrumentation used in clinical and research labs. Emphasizes developing a thorough understanding of the principles of these techniques and instrumentation. Covers applications to specific analyses and instrument troubleshooting. Prereq. INT 3102, INT 3103, MLS 3354, undergraduate clinical chemistry, analytical and organic chemistry, and medical physiology.

MLS 3353 Clinical Chemistry Quality Assurance
Discusses statistical procedures; the establishment and use of reference ranges; the analysis of goals and clinical relevance of lab procedures; the evaluation of methods; quality assurance; and sources of biological variation. Prereq. MLS 3352 and biostatistics.

Presents the modern reagents (such as buffers, radioisotopes, lumiphores, fluorophores, enzymes, electrophores, monoclonal antibodies, DNA probes, protein A, avidinbiotin, and detergents) and techniques (such as chromatography [e.g. reversed phase, chiral, affinity and chromatofocusing], capillary and 2D-electrophoresis, immunoassays, DNA purification, polymerase chain reaction, GC and mass spectrometry) important in purifying and detecting biomolecules, especially macromolecules. Prereq. INT 3101, 3102, and INT 3103.

MLS 3355, MLS 3356

Seminar and Report in Clinical Chemistry 1, 2

Offers reports and discussions of current journal articles in clinical chemistry. Prereq. PMC 3301.

MLS 3365 Medical Laboratory Management 1 3QH

Introduces the basic skills and knowledge appropriate to the administration of a medical lab. Covers supervision, operations, organization, productivity, human behavior, communications, and personnel management. <a href="Pereq">Prereq</a>. <a href="Medical lab experience or permission of instructor.</a>

The following courses, MLS 3331 through MLS 3602 are available to students of the Specialist in Blood Banking Program. Registration requires permission of the director and the chairperson of the Medical Laboratory Science Program.

MLS 3331 Genetic and Immunologic Aspects of Blood Group Identification 1QH

Offers lectures dealing with immune response, physical chemistry of immunohematological tests, immunological diseases, tests for detection and identification of antibodies and antigens, principles of human genetics, blood group genetics, and population and family studies. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 1631 and permission of instructor.

MLS 3332 Principles and Foundations of the Blood Group Systems 2 QH

Presents lectures and experience with the human blood group systems, their antigens and antibodies, genetic inheritance and interactions, frequencies, mutants and alterations by disease states, and blood group testing. Conducted at the New England Deaconess Hospital Blood Bank Training Center. <a href="Prereq">Prereq</a>. MLS 3331, MLS 3531, and permission of instructor.

MLS 3333 Design and Problems of Compatibility Testing 1QH Includes lectures and experience with the design and purpose of compatibility testing; factors complicating compatibility procedure; techniques employed in compatibility testing; leukocyte, platelet, and tissue compatibility; and special cross-match and transfusion procedures. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 3331, MLS 3332, MLS 3531, MLS 3532, and permission of instructor.

# MLS 3334 Principles of Hematology and Coagulation 3QH Related to Transfusion

Offers lectures and lab experience related to hemoglobins; iron metabolism; blood formation; blood volume functions of circulating cells; anemias; leukemias and lymphomas; and coagulation theories, factors, and disorders. Conducted at the New England Deaconess Hospital Blood Bank Training Center. <u>Prereq. Permission of instructor.</u>

# MLS 3335 Transfusion Therapy

2QH

Presents lectures discussing the selection of blood donors, phlebotomy and pheresis procedures, processing requirements, donor reaction, blood components, and physical characteristics of stored blood. Topics include indications for transfusion, transfusion reaction, therapeutic phlebotomy and pheresis autologous transfusions, pediatric transfusions, massive blood replacement, extracorporeal perfusion, cardiopulmonary bypass and dialysis. Prereq. MLS 1631 and permission of instructor.

Immunohematology Administration MLS 3336 2QH Offers lectures and experience dealing with standards for blood banks and transfusion services (federal, state, AABB); requirements for state, FDA, and NIH (BOB) licensing; the American Blood Commission; and inspection and accreditation donor procurement. Considers interbank blood exchange; organization of blood bank and transfusion service; medical and legal aspects of transfusion practice; design of physical facilities; and evaluation, selection, and maintenance of equipment. Also discusses evaluation and selection of supplies and reagents; preparation; labeling requirements; quality control systems; proficiency testing programs; record keeping; computer principles, use of computer facilities; and operations of donor facilities and blood bank labs. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereg. MLS 1631.

# MLS 3531 Genetic and Immunologic Aspects of Blood 1QH Group Identification Laboratory

Offers lab experience with immune response, physical chemistry of immunohematological tests, immunological diseases, tests for detection and identification of antibodies and antigens, principles of human genetics, blood group genetics, and population and family studies. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 1631 and permission of instructor.

MLS 3532 Principles and Foundations of the Blood Group Systems Laboratory

2QH

Offers lab experience with human blood systems, antigens and antibodies, genetic inheritance and interactions, frequencies, mutants and alterations by disease states, and blood group testing. Conducted at the New England Deaconess Hospital Blood Bank Training Center. <a href="Prereq">Prereq</a>. MLS 3331, 3531, and permission of instructor.

MLS 3533 Design and Problems of Compatibility Testing Laboratory

2QH

Presents lab experience with the design and purpose of compatibility testing; factors complicating compatibility procedures; techniques employed in compatibility testing; leukocyte, platelet and tissue compatibility; and special cross-match and transfusion procedures. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 3331, MLS 3531, MLS 3332, MLS 3532, and permission of instructor.

Provides lab experience with selection of blood donors, phlebotomy and pheresis procedures, processing requirements, donor reaction, blood components, and physical characteristics of stored blood. Covers indications for transfusion, transfusion reactions, therapeutic phlebotomy and pheresis, autologous transfusions, cardiopulmonary bypass, and dialysis. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 1631 and permission of instructor.

Offers lab experience with standards for blood banks and transfusion services (federal, state, AABB); requirements for state, FDA, and NIH (BOB) licensing; the American Blood Commission; inspection and accreditation donor procurement; and interbank blood exchange. Covers organization of blood bank and transfusion service; medical and legal aspects of transfusion practice; design and physical facilities; evaluation, selection, and maintenance of equipment; evaluation and selection of supplies and reagents; labeling requirements; quality control systems; proficiency testing programs; record keeping; computer principles, and the use of computer facilities; operations of donor facilities; and blood bank labs. Conducted at the New England Deaconess Hospital Blood Bank Training Center. Prereq. MLS 1631 and permission of instructor.

MLS 3602 Blood Banking - MLS Seminar

1QH

Covers revolving topics in blood banking.

# End of Listing for Specialist in Blood Banking Program.

MLS 3538 Immunobiology Laboratory Requires students to undertake individual research projects relating topics covered in lecture.	
MLS 3603 Clinical Chemistry - MLS Seminar Discusses current research.	1QH
MLS 3604 Hematology MLS Seminar Covers revolving topics.	1QH
MLS 3605 Immunology - MLS Seminar Covers revolving topics.	1QH
MLS 3606 Management - MLS Seminar Covers revolving topics.	1QH
MLS 3607 Microbiology - MLS Seminar Covers revolving topics.	1QH
MLS 3608 Education - MLS Seminar Covers revolving topics. Prereq. MLS 3221 and MLS 3222, or permisinstructor.	1QH sion of
MLS 3609 Immunohematology - MLS Seminar Covers revolving topics.	1QH
MLS 3798 Master's Thesis Continuation Offers continuation of research experimental work for the master's thesis. Prereq. MLS 3821.	<b>0QH</b> s
MLS 3801 Graduate Research Report 1 Studies a special topic in medical lab science, involving individual research, undertaken and reported under the direction of a faculty member. Prereq. Master's candidate standing and Permission of instructor.	2QH

## MLS 3802 Graduate Research Report 2

2QH

Continues MLS 3801. Students may register twice for a total of four credit hours. Prereq. Master's candidate standing and MLS 3801.

# MLS 3821 MLS Thesis

2QH

Involves analytical or experimental work conducted under the auspices of the department. Students may register three times for a total of six quarter hours. May be taken after completion of research and during the quarter in which the thesis is written, reviewed, and defended. <a href="Prereq">Prereq</a>. <a href="Master's cadidate standing and written permission of instructor.

# Pharmacy

# PAH 3101 Principles of Medicine 1

6QH

Offers an intensive, three-quarter, organ-system based sequence encompassing the anatomy, physiology, pathophysiology, and therapy of disease. (Serves as the major component of the second-year curriculum of the Tufts School of Medicine and meets for approximately eighteen hours per week.) Prereq. PharmD candidate standing.

PAH 3102 Principles of Medicine 2 Continues PAH 3101. Prereg. PAH 3101.

6QH

PAH 3103 Principles of Medicine 3 Continues PAH 3102. Prereg. PAH 3102. 6QH

# PAH 3201 Drug Literature Evaluation

2QH

Examines the principles and practice of drug information, literature retrieval, and evaluation of the pharmacy and medical literature. <u>Prereq. PharmD candidate standing.</u>

# PAH 3211, PAH 3212, PAH 3213 Pharmacotherapeutics 1, 2, 3

2QH each

Offers a three-quarter sequence in advanced contemporary therapeutics of disease. Topics parallel material presented in the principles of medicine sequence. <u>Prereq. PharmD candidate standing.</u>

PAH 3221 Psychosocial Aspects of Health Care

Studies psychological and social concerns that determine patient behavior and impact health care. <a href="Prereq">Prereq</a>. PharmD candidate standing.

PAH 3231 Pharmacokinetics in Drug Therapy 3 QH Examines the application of clinical pharmacokinetic information and techniques to patient care. Discusses the strategies of therapeutic drug monitoring for various drug categories and the use of analytic decistion techniques in pharmacokinetic consultations. <a href="Prereq">Prereq</a>. PharmD candidate standing or permission of instructor.

PAH 3311 4QH PAH 3312, PAH 3313, PAH 3314 5QH each Clerkship 1, 2, 3, 4

Offers a four-quarter sequence of advanced clinical clerkship rotations in patient care at various affiliated clinical sites. Students participate in "rounding" activities with medical and other health professionals and have the opportunity to provide drug information in the therapeutic decision-making process. The emphasis in these rotations is on helping students develop skills and familiarity with the application of drugs in the clinical setting as well as the usual progression of disease. Rotations include internal medicine, ambulatory care, and elective experiences. Involves approximately forty hours per week. <a href="Perequarter">Prereq</a>. <a href="Perequarter">PharmD candidate standing</a>.

## PAH 3321 Patient Assessment

2QH

Explores the general principles of history taking and physical examination. Focuses on organ systems of particular importance to the clinical pharmacist in monitoring drug response. <a href="Prereq">Prereq</a>. <a href="PharmD">PharmD</a> candidate standing.

PAH 3601, PAH 3602 Seminar 1, 2

Offers a two quarter sequence covering topics of relevance to the clinical pharmacy practitioner. Principles of effective communication and teaching are discussed. Students are expected to make oral presentations covering various therapeutic and related subjects as well as the progress of their Investigational projects. Prereq. PharmD candidate standing.

PAH 3643 Biomedical Science Research Report 1 2QH Requires students to present and participate in research group-related seminars, the format of which will be determined by their advisers.

Prereq. Doctoral candidate standing.

PAH 3644 Biomedical Science Research Report 2 2QH Continues PAH 3643. Prereq. PAH 3643.

PAH 3645 Biomedical Science Research Report 3 2QH Continues PAH 3644. Prereq. PAH 3644.

PAH 3646 Biomedical Science Research Report 4 2QH Continues PAH 3645. Prereq. PAH 3645.

PAH 3647 Biomedical Science Research Report 5
Continues PAH 3646. Prereg. PAH 3646.

2QH

PAH 3648 Colloquium Presentation

1QH

Requires students to present one formal seminar on their research; this presentation will be open to all those interested. <u>Prereq. Doctoral candidate standing.</u>

PAH 3701 Human Nutrition

3QH

Studies nutrients considered essential for optimal human nutrition. Examines the digestion, absorption, metabolism, and excretion of each nutrient. Discusses food sources, recommended intakes for normal individuals, deficiency, and toxicity syndromes of public health interest.

PAH 3705 Nutrition Seminar

1QH

Aids students in developing critical thinking regarding nutrition issues important to the consumer. Introduces students to a variety of readings that present varying viewpoints about nutrition issues, and discusses these issues.

PAH 3707 Experimental Design and Biometrics 3QH Discusses fundamental principles of experimental design and statistical analysis, with particular emphasis on clinical research. Includes discussion and descriptive statistics, hypothesis testing, analysis of variance, correlation, regression, chi-square test, and nonparametric methods.

PAH 3731 Computers for Health Care

Introduces computer applications and the management of computer applications in health care. Applies the principles of information flow and clinical patient data to the information system lifecycle, emphasizing the systems analysis process as applied to health care application selection, implementation, evaluation, and monitoring. Analyzes representative applications in different health care disciplines, and stresses the manager's role.

PAH 3799 Dissertation Continuation 0QH Continues PAH 3813. Prereq. PAH 3813 must be taken three times before registering for this course.

PAH 3801 Investigational Project each 2QH Offers the opportunity to demonstrate the ability to identify a problem within the domain of clinical pharmacy, to formulate a hypothesis, to

develop methods of collecting and interpreting the data in order to test the hypothesis, and to report the investigation in writing using a thesis format. (investigational component of the PharmD program). <a href="Prereq">Prereq</a>. <a href="Prereq">PharmD candidate standing</a>.

PAH 3804 Investigational Project Continuation 1QH Continues PAH 3801. Prereq. PAH 3801.

PAH 3805 Independent Study PharmD

Prereq. Written permission of instructor.

PAH 3806 Investigational Project 2 1QH Offers the opportunity to demonstrate the ability to identify a problem within the domain of clinical pharmacy and to report the investigation in writing using a thesis format (investigational component of PharmD program). Prereq. PharmD candidate standing.

PAH 3813 Dissertation
Prereq. Written consent.

# **Pharmacology**

## PCL 3100 Introduction to Pharmacology

2QH

Provides basic knowledge of the principles that apply to the study of drug action and effectiveness. Initially emphasizes the shared properties of drug molecules, such as absorption and distribution, receptor interactions, and drug metabolism. Subsequently focuses on autonomic and CNS pharmacology.

# PCL 3101 Concepts in Pharmacology

2QH

Offers in-depth coverage of the fundamental principles of pharmacology. Covers pharmacodynamics, including dose-effect relationships and drugreceptor interactions. Presents pharmacokinetic concepts, including absorption, distribution, and elimination as well as common pathways of drug metabolism. Also includes discussion of pharmacogenetics, drug resistance, tolerance, and physical dependence. Provides an overview of the drug discovery and development process. This course is a prerequisite for succeeding courses in pharmacology and toxicology. Prereq. Graduate student standing or permission of instructor.

# PCL 3121 Experimental Pharmacology

2QH

Offers a lab experience with experimental pharmacology involving whole animals, isolated tissues, and drug receptors to demonstrate classical research methodologies. Prereq. PCL 3101, PCL 3153, and admission to pharmacology or toxicology program, or permission of pharmacology program director.

# PCL 3131 Receptor Pharmacology

2QH

Reviews receptors for drug substances and for endogenous ligands in a format that combines lecture presentations and discussion. Focuses on the evaluation of current literature. Covers the techniques available to study receptors; various models for receptor-ligand interaction; stereochemical aspects of receptor interactions; receptor-mediated coupling mechanisms; and the evaluation of several specific receptor systems.

Prereq. MLS 3301, PCL 3101, INT 3101, INT 3102, and INT 3103, or permission of instructor.

# PCL 3141 Pharmacology of Drug Dependence

2QH

Surveys the major drug classes subject to misuse and addiction. Emphasizes general concepts of tolerance and dependence, the general pharmacology of prototypes of abused drugs, patterns and consequences of abuse in humans, and recent research advances. Examines selected research papers critically in order to stimulate quantitative pharmacological thinking. <u>Prereq. PCL 3101</u>.

PCL 3153 Pharmacological Basis of Therapeutics 1 2QH Surveys the chemical and pharmacological basis of the major classes and characteristics of a prototype drug from each class. Characteristics studied include indications, adverse reactions, contraindications, structure-activity relationships, metabolism, mechanisms of action, and clinically significant interactions. Reading assignments cover animal models relevant to therapeutic screening and/or testing and the appropriate design of clinical trials. <a href="Pereq">PCL 3101</a>.

PCL 3154 Pharmacological Basis of Therapeutics 2 2QH Continues PCL 3153. Prereq. PCL 3153.

PCL 3155 Pharmacological Basis of Therapeutics 3 2QH Continues PCL 3154. Prereq. PCL 3154.

# PCL 3301 Pathology

2QH

Introduces the study of the nature of disease, emphasizing the general mechanisms and pathogenesis. Focuses on the effect of disease on the human body, stressing the language of disease. Extensively covers basic principles of disease processes and more common special diseases. May require research paper, at the discretion of the instructor. <a href="Prereq">Prereq</a>. anatomy and physiology.

PCL 3601 Pharmacology Seminar

Provides the opportunity for students to gain experience in oral and written presentation and in interpreting pharmacological data. Offers topics from current pharmacology literature selected by participants. Prereq. PCL 3101.

PCL 3801 Pharmacologic Methods 1 3QH Has students carry out experiments in the lab of a pharmacology or toxicology faculty member, demonstrating techniquesin order to study a pharmacologic question. <a href="Pereq">Prereq</a>. Ph.D. students only.

PCL 3802 Pharmacologic Methods 2
Continues PCL 3801. Prereg. PCL 3801.

3QH

PCL 3811 Research Report in Pharmacology 1 2QH Offers a selected research project undertaken by the student under the direction of a faculty member. Prereq. PCL 3101.

PCL 3812 Research Report in Pharmacology 2 2QH Continues PCL 3811. Prereq. PCL 3811.

PCL 3821 Pharmacology Thesis

Students may register three times for a total of six quarter hours. <a href="Pereq">Prereq</a>.

Written permission of program director.

# PCT 3101 Introduction to Biopharmaceutics and Pharmacokinetics

3QH

Offers students the opportunity to remedy deficiencies in biopharmaceutics and pharmacokinetics. Includes general discussion of concepts of one- and two-compartment models; linear and nonlinear pharmacokinetics; drug kinetics after intravenous, intramuscular, or oral administration; practical methods of compartmental models utilizing plasma and/or urinary data; multiple dosing kinetics; bioavailability and bioequivalence of drug products; and the effect of renal impairment on drug kinetics. Prereq. Permission of instructor.

## PCT 3111 Clinical Pharmacokinetics

2QH

Focuses on applying various pharmacokinetic techniques to the estimation of dosage regiments, evaluation of drug therapy, consultation on drug selection, and assessment of bioavailability and bioequivalence data.

Prereq. Background in biopharmaceutics or permission of instructor.

#### PCT 3112 Advanced Pharmacokinetics

**3QH** 

Acquaints graduate students with theoretical compartmental analysis in pharmacokinetics. Includes discussion of derivation and treatment of general equations for linear and nonlinear mammillary models. Uses of Laplace transform, transfer functions, general partial fraction theorem, and input-disposition functions in pharmacokinetics. Emphasizes practical methods used to kinetically analyze the absorption, distribution, and elimination of drugs. Explores computer methods, physiological models, and stochastic compartmental systems. Prereq. MTH 1245, MTH 1246, graduate standing, and permission of instructor.

# PCT 3161 Drug Metabolism

2QH

Presents the current principles and methods for studying the metabolic transformation and physiological disposition of drugs and other chemicals of pharmacological and toxicological interest. Covers the chemistry of phase 1 and phase 2 reactions from a mechanistic and empirical viewpoint. Assesses the role of structure, bonding, molecular configuration, substitution, and related physiochemical factors in enzymatic reactions, as well as the effects of enzyme induction and other factors in enzymatic reactions. Explores the effects of enzyme induction and other factors such as species, sex, and age on the extent of metabolism. Prereg. PCL 3010 or permission of instructor.

#### PCT 3200 Advanced Pharmaceutics

2QH

Studies the theoretical principles of modern physical pharmacy. Emphasizes physical insight and mathematical rigor. Discusses the application of basic principles of thermodynamics, colligative properties, colloidal systems, molecular and micellar association, surface chemistry, mass transport phenomena, and the chemical stability of drugs. Prereq. PCT 1340, PCT 1350, or permission of instructor.

# PCT 3205 Novel Drug Delivery System

2QH

This class attempts an in-depth examination of the methodology and significance of novel delivery systems that transport drugs safely to sites when they are needed, and thus facilitate and/or control their release. Includes the discussion of following systems currently under investigation: nanoparticles, cellular vectors, microcapsules, microspheres, prodrugs, liposomes as drug carriers, polymeric systems, and macromolecular systems such as DNA, glycoproteins, monoclonal antibodies, and hormones. Prereq. PCT 3101, PCT 3200, or permission of instructor.

#### HOSPITAL PHARMACY

PHP 3101 Hospital Pharmacy Administration 1 3QH Studies management of a hospital pharmacy personnel and financial resources. Covers management skills, and personnel administration and organization, as well as budget preparation, analysis, and control, and hospital reimbursement.

PHP 3102 Hospital Pharmacy Administration 2 3QH Presents an overview of hospital pharmacy services and an introduction of hospital areas that either require or relate to pharmacy services. Discusses hospital administration, materials management, quality assurance programs, committee responsibilities, drug distribution systems, and the development and writing of a proposal for new services.

PHP 3121 Health Care Administration 1 3QH Examines the socioeconomics and statistics of health care, including governmental programs, legislative trends, third-party insurance and welfare programs, and other areas that may affect the management of the modern institutional pharmacy. Prereq. Hospital pharmacy graduate standing or permission of instructor.

# PHP 3131 Computer Applications in Hospital Pharmacy 3QH

Reviews past, present, and future applications of computer systems in institutional practice. Covers management aspects of computer systems development and selection. Discusses the use of microcomputers and departmental computers to support clinical and management practice.

PHP 3141 Legal Aspects/Federal Legislation in Pharmacy2QH Analyzes the federal and state laws related to the distribution of drugs in the institution. Includes discussion of common-law liabilities such as malpractice and other frequently encountered problems. Prereq. Hospital pharmacy graduate candidate standing.

PHP 3165 Special Topics in Hospital Pharmacy 2QH Covers selected topics of interest to hospital pharmacy practitioners.

# PHP 3201 Clinical Pharmacy Considers patient-oriented aspects of the application of therapeutic agents. Studies the relationship of therapeutic regimens to lab tests and drug interactions, as well as the role of the hospital pharmacist as an active member of the health-care team dealing directly with inpatients

and outpatients. Prereq. Hospital pharmacy graduate candidate standing or permission of instructor.

PHP 3211 Contemporary Therapeutics 1

Explores recent developments in current therapeutic approaches and their rationale in the treatment of cardiovascular, neurological, gastrointestinal, musculoskeletal, and metabolic diseases of a noninfectious nature. Discusses therapy related to aging and selected genetic diseases. <a href="Perequation-Precaded-Physical-Ph

PHP 3212 Contemporary Therapeutics 2

Examines current concepts of infectious diseases and the rationale for the chemotherapeutic treatment of these conditions. Studies diseases of the blood and blood-forming organs, neoplastic disease, and diseases related to deficiency states. <a href="Pereq">Prereq</a>. PHP 3201.

PHP 3231 Drug Monitoring

Presents the process by which drugs are monitored in order to determine their effectiveness, safety, prevention of iatrogenic factors, drug-drug interactions, and matters affecting patient compliance with a therapeutic regimen. Considers the utilization of this information in improving patient care. <a href="Prereq">Prereq</a>. Written permission.

PHP 3241 Sterile Products

Studies theory principles, methods, and techniques in preparing sterile, purogen- and particulate-free products. Discusses equipment and lab design required for the manufacture of different types of sterile products and the practical considerations essential for their production. Prereq. Permission of instructor.

PHP 3601 Seminar on Hospital Pharmacy

Offers a seminar on current developments of specific problems in hospital pharmacy that have been studied in depth by students with guidance from the graduate faculty. May alternate student presentations with guest speakers on topics of current interest. Strongly imphasize student participation in the discussions. <a href="Pereq">Prereq</a>. Hospital pharmacy graduate student standing.

PHP 3801 Hospital Pharmacy Thesis

Students may register three times, for a total of six quarter hours.

Prereq. Written permission of instructor.

#### MEDICINAL CHEMISTRY

# PMC 3101 Chemistry of CNS Depressants

3QH

Presents and discusses the chemistry, mechanism of action, and structure-activity relationships of general anesthetics, hypnotics and sedatives, antiepileptics, analgesics, tranquilizers, and muscle relaxants. Considers the mechanics of drug design and methods of modification.

Prereq. PMC 3105 or permission of instructor.

PMC 3102 Chemistry of Autonomic Drugs 3 QH Discusses drug action on the central nervous system, emphasizing the action mechanism of the chemical mediators of the peripheral nervous system. Considers the role of the agents affecting this system adrenergic and cholinergic and reversible and irreversible inhibitors in relation to their chemical structure and biological activity. Prereq. PMC 3105 or permission of instructor.

PMC 3103 Chemistry of Anti Infectives

Studies the organic medicinal chemistry of various chemotherapeutic agents used to treat infectious disease. Focuses on chemistry, mechanism of action, structure-activity relationships, and recent research. Topics include antibacterials (sulfonamides, antifolates, and quinolones), antibiotics (beta-lactams, aminoglycosides, and tetracyclines), antivirals, and investigational drugs used in HIV infection therapy.

Prereq. PMC 3105 and biochemistry or permission of instructor.

# PMC 3104 Biochemical and Pharmacological Principles of Cancer Chemotherapy

3QH

Presents recent developments in the treatment of cancer, including alkylating agents, antimetabolites, hormones, miscellaneous compounds, and combinations of the above with radiation and immunology. Explores possible mechanisms of chemotherapeutic action. <u>Prereq. PMC 3105 or permission of instructor.</u>

PMC 3105 Principles of Medicinal Chemistry

Presents fundamental chemical and stereochemical principles that account for the properties of drugs and contribute to an understanding of drug action. Focuses on the physiochemical properties of functional groups as they relate to overall properties of drug molecules. Covers delivery of drugs to the central nervous system in terms of lipophilicity/hydrophilicity, ionization potential and hydrogen-bonding capability; the interaction of drugs with neurotransmitter, hormonal, and neurohormonal systems; qualitative and quantitative structure-activity

relationships; drug biotransformation; and principles of and recent developments in drug design.

PMC 3141 Special Topics in Medicinal Chemistry 2QH Presents aspects of medicinal chemistry of particular interest in an area not covered by other courses. May include molecular modeling, steroids, or biotechnology.

PMC 3171 Heterocyclic Drugs in Medicinal Chemistry 3QH Studies the application of the combined principles of medicinal and heterocyclic chemistry to the synthesis of pharmaceutically useful compounds. Emphasizes a critical evaluation of the literature methods with respect to synthesis and biological activity. <a href="Perequation-Prereq">Prereq</a>. Advanced organic chemistry or permission of instructor.

PMC 3511 Advanced Drug Synthesis

Presents the application of synthetic and analytical techniques to the preparation of biologically active compounds and their intermediates. Demonstrates the process of drug development from design to synthesis to final characterization. Includes laboratory documentation and report preparation.

PMC 3601 Medicinal Chemistry Seminar

Reports on and discusses current journal articles and research in medicinal chemistry. Prereq. PMC 3101.

PMC 3661 Medicinal Chemistry Research Report 2QH Requires student to undertake literature research project and prepare a major report.

PMC 3662 Medicinal Chemistry Research Report 3QH Requires student to undertake literature research project and prepare a major report.

RSC 3201 Radiopharmaceutical Chemistry

Discusses the application of chemistry to the design and synthesis of radiodiagnostic agents. Presents the properties of the radionuclides and their biological carriers as they relate to their uses in nuclear medicine.

Prereq. PMC 3105 or permission of instructor.

# TOX 3101 Concepts in Toxicology 1

3QH

Presents the principles of toxicology from an organ system perspective. Focuses on the concepts used to evaluate toxicity; the mode of injury at the organ and cellular level; and the basic subcellular mechanisms through which toxic agents produce damaging effects. Uses recent toxicological literature to introduce concepts for evaluating toxicity through data analysis.

# TOX 3102 Concepts in Toxicology 2

3QH

Continues TOX 3101. Emphasizes the interpretation of toxicological literature to evaluate the risk involved in exposure to prototype chemicals. Employs structure activity and biochemical methods of assessment to evaluate the toxicity of major classes of chemical compounds.

# TOX 3121 Environmental Toxicology

3QH

Discusses the distribution, interaction, and effects of toxic agents on the biosphere. Examines pollutants grouped by chemical and use characteristics including pesticides, food additives, metals, carcinogens, and teratogens. Addresses the action mechanism and selectivity basis of toxic agents. Applies the results of toxicologic investigation to an understanding of the chemical pollution of the environment.

TOX 3501 Biochemical Toxicology Laboratory 4QH Introduces investigative methods for assessing toxicity. Develops the ability to analyze and interpret data generated in the lab and in the literature, and sharpens technical report writing skills.

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MASTER OF SCIENCE IN EDUCATION, MSED	
Master of Science in Education, Special Needs Specialization	
Master of Science in Education, Intensive Special Needs Specialization	
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COLLEGE STUDENT DEVELOPMENT AND COUNSELING, MS	
Human Resource Counseling, MS	
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#### Counseling Psychology, Rehabilitation, and **Special Education Programs**

#### MASTER OF SCIENCE IN COUNSELING PSYCHOLOGY, MSCP

The program seeks to educate and train students in applied aspects of psychology. This includes disciplinary studies and professional practice. Upon completing the program, students may seek further graduate study or obtain entry-level positions in mental health agencies, clinics and hospitals, or community programs. This program seeks to ensure that students are prepared to meet the ever-changing demands of the mental health profession.

The diverse faculty, most of whom are both practitioners and scholars, are in an excellent position to assess the rapid changes in licensing and employment opportunities as well as actual practice.

#### **Admission Requirements**

Minimal admission requirements include an undergraduate degree in psychology or its equivalent, G.P.A. of 3.0 or better preferred, above average GRE or MAT scores preferred, paraprofessional experience in a helping relationship and appropriate personal development, other non-intellectual factors.

RequiredCourses		
CRS3303	Counseling Theory and Process	3
CRS3306	Psychological Testing	3
CRS3307	Group Counseling	3
CRS3310	Psychopathology I	3
CRS3311	Psychopathology II	3
CRS3325	Parent and Family Counseling	3
CRS3339	Contemporary Theories of Psychotherapy	3
CRS3335	Individual Intelligence Testing	4
CRS3341	Psychodiagnostic Measures	3
CRS3345	Vocational Counseling Strategies	3
CRS3350	Psychological Counseling Strategies	3
CRS336I	Practicum I	3
CRS3362	MSCP Internship I	3
CRS3363	MSCP Internship II	3
CRS3387	Cross-Cultural Counseling or	
CRS3356	Feminist Therapy	3
CRS3465	Research Methods and Design (Statistics	
	prerequisite)	3
Elective		3
Elective		3
Elective		3
F1 .1		

#### Electives

Choose three within the department. Other electives may be substituted with advisor's prior written approval.

CRS3331	Case Studies in Marriage and Family	
	Counseling	3
CRS3337	Advanced Group Counseling	3
CRS3338	History and Systems of Psychology	3
CRS3347	Health Issues	3

CRS3352	Rehabilitation of Alcoholic and Drug	
	Dependent	3
CRS3355	Child Psychotherapy	3
CRS3356	Feminist Therapy	3
CRS3357	Life Span Development	3
CRS3384	Human Sexuality	3
CRS3385	Reality Therapy	3
CRS3386	Legal and Ethical Issues in Professional	
	Psychology	3
CRS3387	Cross-Cultural Counseling	3

Total number of courses: 19 Total number of credits: 58 QH

The typical length of the program is two years full-time. This includes a required 700-hour practicum/internship experience supervised by licensed mental health professionals. Sites for these experiences may include hospital in-patient psychiatric units, community-based counseling services, women's crisis centers, and other settings.

#### MASTER OF SCIENCE IN EDUCATION, MSED

Two Master of Science in Education degrees are offered through the College. The Master of Science in Education with a specialization in Special Needs meets certification requirements for grades pre-K - 9 and grades 5 - 12. The Master of Science in Education with a specialization in Intensive Special Needs meets certification requirements for all levels.

Students pursuing certification in special needs will be prepared to educate children and youth with mild to moderate special needs from either the pre-kindergarten through middle school years (pre-K-9) or the middle school through high school years (5 - 12). Students pursuing certification in Intensive Special Needs will be prepared to educate children and youth with more severe special needs from the prekindergarten through high school and early adulthood levels. The education of children and youth with special needs or intensive special needs takes place in different settings varying from classrooms, which may also include children without special needs, to private Chapter 766 approved settings. Preparation centers on understanding the nature and assessment of various special needs, achieving competence in curriculum adaptation, developing instructional strategies, and evaluating the effectiveness of programs for children and youth with special needs.

#### Requirements for Certification

The Department of Education in the Commonwealth of Massachusetts requires a two-step process for obtaining certification: provisional certification and standard certification. Students may enter the program having obtained provisional certification elsewhere, or may pursue provisional certification and then standard certification. Standard certification requires at least 400 hours of clinical experience in a public or private setting under the supervision of a certified special education teacher, the successful completion of a research project, and the successful completion of a Master's degree program.

#### Admission Requirements

Students are encouraged to have previous experience or course work in child development and learning theory. Students may have to take additional program-related courses as prerequisites depending upon academic background and previous experience. G.P.A. of 3.0 or above preferred; above average GRE or MAT scores also preferred.

Master of Science in Education, Special Needs Specialization

<b>Required Co</b>	urses (Standard Certification Program) *	QH
CRS3324	Etiology and Development of Special Needs	3
CRS3312	Psychology of Individuals with Special Needs	3
CRS3301	Educating Individuals with Learning Problems	3
SLA3604	Language Disturbances in Children	4
CRS3315	Assessment in Special Education	3
CRS3330	Behavior Management	3
CRS3304	Educating Individuals with Behavior Disorders	3
CRS3316	Curriculum-Based Assessment and Instruction	
	for Educators	3
CRS3585	Clinical Experience I	3
CRS3586	Clinical Experience II	3
ED 3320	The School in a Culturally Diverse Society	4
ED 3340	Introduction to Educational Statistics	4
CRS3465	Research Methods and Design	3

Total number of courses:	13
Total number of credits	42 QH

<sup>\*</sup> Given provisional certification

Master of Science in Education, Intensive Special Needs Specialization

Required Co	ourses (Standard Certification Program)*
CRS3324	Etiology and Development of Special Needs
CRS3312	Psychology of Individuals with Special Needs
CRS3301	Educating Individuals with Learning Problems
SLA3604	Language Disturbances in Children
CRS3329	Assessment and Program Development for the
	Severely Disabled
CRS3330	Behavior Management
CRS3316	Curriculum-Based Assessment and Instruction
	for Educators
CRS3328	The Severely Disabled
CRS3585	Clinical Experience I
CRS3586	Clinical Experience II
ED 3320	The School in a Culturally Diverse Society
ED 3340	Introduction to Educational Statistics
CRS3465	Research Methods and Design

Total number of courses:	13
Total number of credits:	42 QH

<sup>\*</sup> Given provisional certification

Non-Degree Program, Special Needs (Provisional Ceritification)

Required Co	ourses	QH
CRS3324	Etiology and Development of Special Needs	3
CRS3312	Psychology of Individuals with Special Needs	3
CRS3301	Educating Individuals with Learning Problems	3
ED 3400	The Instructional Process	4
ED 3401	Fundamentals of Curriculum Development	4
CRS3319	Pre-Practicum and Practicum in Special	
	Education	3

Non-Degree Program, Intensive Special Needs (Provisional Certification)

Required Courses		
CRS3324	Etiology and Development of Special Needs	3
CRS3312	Psychology of Individuals with Special Needs	3
CRS3301	Educating Individuals with Learning Problems	3
CRS3328	The Severely Disabled	3
CRS3319	Pre-Practicum and Practicum in Special	
	Education	3

#### APPLIED BEHAVIDR ANALYSIS, MS

QH

3

3

3

3

3

3

3

3

The Northeastern University-Shriver Center Master of Science Program in Applied Behavior Analysis (MABA) offers students comprehensive in-service training in the application of learning theory to the training of persons with developmental disabilities. This part-time program, which requires a minimum of three years to complete, is primarily based at the Shriver Center in Waltham, Massachusetts. The Shriver Center is a University Affiliated Program (UAP) for research and training in developmental disabilities and has affiliations with more than twenty Boston area graduate programs.

Throughout the three-year program students are actively engaged in providing services to persons with developmental disabilities. All students are employed full time in a human service or educational agency serving individuals with developmental disabilities. Although the general orientation of the program is behavioral, the courses offered are selected to give students a broad knowledge of developmental disabilities. Representative topics include current issues in developmental disabilities, biological basis of mental retardation, and administration of mental retardation services.

Required Courses		ОН
CRS3465	Research Methods and Design	3
CRS3466	Applied Programming Seminar I	3
CRS3467	Applied Programming Seminar II	3
CRS3468	Applied Programming Seminar III	3
CRS3469	Applied Programming Seminar IV	3
CRS3470	Applied Programming Seminar V	3
CRS3471	Programmed Learning	3
CRS3472	Mental Retardation Seminar	3
CRS3475	Advanced Learning Seminar 1	3
CRS3476	Advanced Learning Seminar II	3
CRS3477	Advanced Learning Seminar III	3

CRS3478	Administration of Men	tal Retardation	
	Services*		3
CRS3479	Systematic Inquiry in A	Applied Research I	3
CRS3480	Systematic Inquiry in A	Applied Research II	3
CRS3482	Community-Based Tre	atment*	3
CRS3483	Biological Basis of Me	ntal Retardation*	3
CRS3810	Thesis		2
Total num	ber of courses:	16	
Total number of credits: 50 QH			

\*Specific course not required but most students take this course. Substitution is permitted.

The program consists of sixteen courses, a thesis, and a minimum of fifty quarter hours. The program requires a minimum of three years to complete.

#### **Additional Requirements**

Additional academic requirements include intervention projects, staff training requirements, home case requirements, written comprehensive questions, one thesis project, laboratory experience, interdisciplinary team participation, and oral thesis presentation.

#### COLLEGE STUDENT DEVELOPMENT AND COUNSELING, MS

The focus of the program is on preparing students to work in emerging areas of student affairs. The program prepares students for careers through an emphasis on multiculturalism, the management of rapid change, and participation in a yearlong, 300-hour practicum experience. Students learn to create, implement, and evaluate student development services and programs in higher education. They develop theoretical knowledge and applied skills in individual counseling, group dynamics, and experiential and adult education as well as a systems approach to higher education administration. The study of student development includes theories that describe the development of women, African American, Latino, Asian American, and gay and lesbian students as well as white males. The program's emphasis is on practical application and experiential education, and students complete three practica experiences in related areas of the higher education arena within local colleges and universities. Practica are supervised by onsite professionals and Northeastern University faculty members.

Typical careers include academic advising and assistance, student activities, orientation advising, career counseling, judicial affairs, service learning, cooperative education, general student services administration, residential life, and advising of students who are challenged by some aspect of higher education or of the larger society, such as international students, students of color, disabled students, and many other groups. Graduates of this program are prepared in human relations skills, experiential or adult education, and a systems approach to the management of higher education. Employment rates for graduates continue to be high.

#### **Admission Requirements**

Students enter the program with undergraduate degrees from diverse academic backgrounds, including the social sciences. Students often have had experiences in student activities, leadership positions, residential life, and other aspects of campus activity.

Required Courses QH		
CRS3305	Group Dynamics	3
CRS3370	Foundations in Psychology and College Student	t
	Development	3
CRS3306	Psychological Testing	3
CRS3303	Counseling Theory and Process	3
CRS3309	Introduction to College Student Development	3
CRS3326	Organization and Administration of Student	
	Services	3
CRS3345	Vocational Counseling Strategies	3
CRS3387	Cross-Cultural Counseling	3
CRS3392	College Student Development Practicum 1	3
CRS3393	College Student Development Practicum II	3
CRS3394	College Student Development Practicum III	3
CRS3314	Program Interventions in Student/Staff	
	Development	3
CRS3465	Research Methods and Design (Statistics	
	prerequisite)	3
CRS3384	Human Sexuality or	
CRS3347	Health Issues	3
Elective		3
Elective		3

#### **Electives**

Other electives may be substituted with advisor's prior written approval.

CRS3336	Organizational Behavior in Human Services	3
CRS3349	Psychological Problems of Disability	3
CRS3352	Rehabilitation of the Alcoholic and Drug	
	Dependent	3
CRS3350	Psychological Counseling Strategies	3
CRS3385	Reality Therapy	3
ED 3404	Methods and Materials for Teaching Adults I	3
CRS3356	Feminist Therapy	3
CRS3325	Parent and Family Counseling	3

Total number of courses: 16
Total number of credits: 48 QH

The typical length of time for completion is two years for fulltime students.

#### HUMAN RESOURCE COUNSELING, MS

Human resource counselors are dedicated to the maximal development of employees in the work place in order to promote worker and organizational productivity and well-being. Counselors typically work in three categorical areas: (1) those that offer and interpret technical information for employees, such as that regarding health insurance, retirement, benefits, investments, etc.; (2) those that deal with a wide array of personnel counseling issues, including career development, conflict resolution, employment counseling, intake interviewing, out-placement counseling, labor relations, substance abuse, etc.; and (3) those that include employee training and development, continuing education, and so on.

In conjunction with the course work listed on page six, students are required to engage in substantial supervised fieldwork and concurrent practica seminars in actual business and organization settings to deepen their understanding of selected human resources development functions. The curriculum consists principally of a combination of psychology and business courses with the provision for other elective courses according to the student's needs and interests. Pertinent course work, together with an extensive, well-supervised three-term practicum, generally produces students who are prepared to seek a professional position subsequent to completing Master's work.

#### **Admission Requirements**

Students enter the program with undergraduate degrees from diverse academic backgrounds, including social science and business. Students often have experience working in business or industrial settings.

Required Courses		QН
CRS3306	Psychological Testing	3
CRS3303	Counseling Theory and Practice	3
CRS3307	Group Counseling	3
CRS3345	Vocational Counseling Strategies	3
CRS3322	Fundamentals of Human Resource Counseling	3
CRS3465	Research Methods and Design (Statistics	
	prerequisite)	3
INT3540	Computer Applications	3
CRS3364	Human Resource Counseling Practicum I	3
CRS3365	Human Resource Counseling Practicum II	3
CRS3366	Human Resource Counseling Practicum III	3
HRM3301	Organizational Behavior	3
Elective		3
Elective		3
Elective		3

#### **Electives**

Other electives may be substituted with advisor's prior written approval.

HRM3760	Managing People in International Settings	3
HRM3913	Managing Power and Influence	3
HRM3945	Training and Developing Human Services	3

# Total number of courses: 14 Total number of credits: 42 QH

The typical length of time for completion is four terms or one year for full-time students. The 350-hour practicum experience requires students to work a minimum of ten hours per week for thirty-five weeks.

#### REHABILITATION COUNSELING, MS

The Rehabilitation Counseling program at Northeastern University has the primary mission of training professionals to provide rehabilitative services to persons with disabling conditions. This two-year Master of Science degree program includes a 600-hour field experience at a rehabilitation facility that provides students with the opportunity to specialize in a specific disabling condition. Master's degree students specialize in the areas of deafness, industrial counseling, substance abuse, severe special needs, and corrections. The program maintains an unusually wide range, both in the size and kind of practicum affiliations available in rehabilitation and health service organizations. The required 600-hour clinical practicum is supplemented by seminar meetings.

#### Accreditation

Fully accredited by the Council on Rehabilitation Education (CORE), the program helps prepare students for the Certified Rehabilitation Counselor examination by integrating course work with practica. Most rehabilitation counseling classes meet in the late afternoon or evening, simplifying scheduling and facilitating study for those who wish to continue jobs or other daytime activities.

Required Co	ourses	αн
CRS3333	Introduction to Rehabilitation	3
CRS3334	Principles of Medical Rehabilitation	3
CRS3346	Occupational Placement	3
CRS3349	Psychological Problems of Disability	3
CRS3306	Psychological Testing	3
CRS3303	Counseling Theory and Process	3
CRS3350	Psychological Counseling Strategies or	
CRS3345	Vocational Counseling Strategies	3
CRS3512	Critical Issues in Rehabilitation	3
CRS3465	Research Methods and Design (Statistics	
	prerequisite)	3
CRS3395	Rehabilitation Counseling Practicum I	3
CRS3396	Rehabilitation Counseling Practicum II	3
CRS3397	Rehabilitation Counseling Practicum III	3
CRS3387	Cross-Cultural Counseling	3
Elective		3
Elective		3
Elective		3
Electives		
Other electi	ves may be substituted with advisor's prior writte	n
approval.		
CRS3352	Rehabilitation of the Alcoholic and	3
CRS3301	Drug Dependent	3
CRS3301 CRS3325	Educating Individuals with Learning Problems Parent and Family Counseling	3
CRS3325 CRS3307	,	3
CKS5507	Group Counseling	3
Total numb	per of courses: 16	

Total number of courses: 16
Total number of credits: 48 QH

The minimum amount of time for completion is two years for full-time students.

#### APPLIED EDUCATIONAL PSYCHOLOGY, MS

The Master of Science in Applied Educational Psychology has two specializations: School Counseling and School Psychology. School counselors work in schools N-12 and focus on dealing with emotional, educational, and social problems in a school-based/educational setting. School psychologists work in schools K-12 and work with psychological and educational assessments, counseling children and parents and consulting with teachers to meet the special needs of students. The Master of Science program in Educational Psychology with a specialization in school psychology and the Certificate of Advanced Graduate Standing (CAGS) program in School Psychology are taken in combination to lead to certification as a school psychologist.

Applied Educational Psychology, School Counseling Specialization

Students who select a School Counseling program do so because of their interest in helping people cope with developmental issues within a learning environment. They wish to work with individuals to recognize and respond to the impact of major changes and stresses of childhood and adolescence, such as conflict, separation, loss, isolation and intimacy, inclusion and exclusion, and success and failure. The program exposes people to a developmental guidance program that espouses that schools systematically and continuously offer programs designed to deal with age-related concerns.

Whether one works with students, families, or other educators, individually or in groups, the university-based academic and clinical program is designed to facilitate the development of professionals achieving measurable outcomes. Some examples of the counselors' roles include helping students self-assess their abilities, likes, dislikes, and personal qualities; teaching decision making; promoting the process of career exploration and goal setting; training people in social skills; planning educational programs; motivating people toward problem resolution; and participating in crisis interventions. Some of a school counselor's competencies are individual and group counseling, assessment, vocational information, family and parent counseling, and working with diverse groups of people as well as those with special needs.

#### **Professional Certification**

The Applied Educational Psychology program in School Counseling has been approved by the Massachusetts Department of Education. The program of studies follows the certification requirements of the Commonwealth of Massachusetts Department of Education.

# **Admission Requirements**

Requirements for admission include an undergraduate degree in education, psychology, or a related field; above average GRE or MAT scores; and experience working with youth.

Required Co	ourses	QH				
CRS3301	Educating Individuals with Learning Problems	3				
CRS3303	Counseling Theory and Practice	3				
CRS3306	Psychological Testing	3				
CRS3307	Group Counseling	3				
CRS3325	Parent and Family Counseling	3				
CRS3342	Learning Principles and Applications I	3				
CRS3344	Counseling Strategies for Children and					
	Adolescents	3				
CRS3345	Vocational Counseling Strategies	3				
CRS3367	Curriculum-Based Assessment and Instruction					
CRS3387	Cross-Cultural Counseling	3				
CRS3389	School Counseling Practicum I	3				
CRS3390	School Counseling Practicum II	3				
CRS3391	School Counseling Practicum III	3				
CRS3465	Research Methods and Design (Statistics					
	prerequisite)	3				
CRS3520	Normal Development in Childhood and					
	Adolescence	3				
Elective		3				
Total num	ber of courses: 16					
Total num	ber of credits: 48 QH					

The program includes a year-long practicum of 525 hours in a school setting covering either grades N-9 or 5-12 under the supervision of a certified school counselor and university faculty member. The typical length of the program is two years full time.

Applied Educational Psychology, School Psychology Specialization

Students prepare to function as school psychologists in schools and related human service agencies, providing psychoeducational assessment, counseling, and consultation services, as well as in-service training and program planning and evaluation. Students are required to complete both the MS and CAGS to be eligible for certification.

#### **Professional Certification**

The Applied Educational Psychology program and CAGS in School Psychology have been approved by the Massachusetts Department of Education and provisionally approved by the National Association of School Psychologists. The Master's Program in Applied Educational Psychology, Specialization in School Psychology, contains the prerequisites for the Certificate of Advanced Graduate Studies (CAGS) in School Psychology.

## **Admission Requirements**

Requirements for admission include a strong undergraduate record in social sciences or education, with a G.P.A. of 3.0 or better preferred. Prior experience with children in schools and other settings is desirable as well as knowledge of a second language or residence in a foreign country. Above average GRE MAT scores are also helpful.

Required Co	urses	QН
CRS330I	Educating Individuals with Learning Problems	3
CRS3303	Counseling Theory and Practice	3
CRS3306	Psychological Testing	3
CRS3312	Psychology of Individuals with Special Needs	3
CRS3325	Parent and Family Counseling	3
CRS3327	Seminar: Neuropsychology of Learning and	
	Behavioral Disorders	3
CRS3335	Individual Intelligence Testing	4
CRS3342	Learning Principles and Applications I	3
CRS3343	Learning Principles and Applications II	3
CRS3344	Counseling Strategies for Children and	
	Adolescents or	
CRS3355	Child Psychotherapy	3
CRS3367	Curriculum-Based Assessment and Instruction	3
CRS3387	Cross-Cultural Counseling	3
CRS3465	Research Methods and Design	3
CRS3520	Normal Development in Childhood and	
	Adolescence	3
ED3340	Introduction to Educational Statistics	4

Total number of courses: 15
Total number of credits: 47 QH

A pre-practicum experience of seventy-five hours in a school is required. This is accomplished by shadowing a field-based school psychologist during the first or second year. The typical length of the program is two years of academic work, a practicum, and a third year of internship.

## SCHOOL PSYCHOLOGY, CAGS

The CAGS Program in School Psychology prepares students to function as school psychologists in schools and related human service agencies. CAGS students are trained to apply psychological and educational knowledge and skill to facilitate human learning and social-emotional functioning. Though the nature and scope of services delivered are influenced by the unique characteristics of the organizational setting, the CAGS Program prepares graduate students to provide psychoeducational assessment, counseling, and consultation services, as well as in-service training and program planning and evaluation.

When combined with the Master of Science in Applied Educational Psychology with a specialization in School Psychology, the three-year program includes pre-practicum, practicum, and internship experiences. Additionally, students are required to complete successfully a comprehensive examination.

**Year 1:** Students complete MS requirements which prepare them to provide psychoeducational assessment, counseling, and consultation services, as well as in-service training and program planning and evaluation in schools and related child agencies.

Year 2: Completion of CAGS academic, practicum, and prepracticum requirements (600 and seventy-five hours respectively) takes place in the second year. Upon successful completion of the academic program, a 600-clock-hour practicum placement under the supervision of a certified school psychologist, and successful completion of the comprehensive examination, the student is eligible for provisional Massachusetts School Psychologist Certification.

Year 3: Upon completion of 1200 hours of internship and attendance at internship seminars, students will be ready to obtain full certification as a school psychologist in Massachusetts and national certification if they pass the national certification examination.

#### **Admission Requirements**

A Master of Science in School Psychology or closely related field, unless currently enrolled in the combined MS and CAGS program in School Psychology. The Master's Program in Applied Educational Psychology with Specialization in School Psychology contains the prerequisites for the CAGS Program in School Psychology.

#### **Professional Certification**

The CAGS in School Psychology is approved by the Massachusetts Department of Education and has conditional approval from the National Association of School Psychologists.

Required	Courses	QH
CRS3310	Psychopathology 1	3
CRS3311	Psychopathology II	3
CRS3313	Psychological Assessment and Screening of	
	Preschool Children	3
CRS3317	Consultation Seminar	3
CRS3330	Behavior Management	3
CRS3332	Seminar in School Psychology	3
CRS3336	Organizational Behavior in Human Services	3
CRS3341	Psychodiagnostic Measures	3
CRS3359	Community Psychology	3

CRS3381	School Psychology Practicum 1	2
CRS3382	School Psychology Practicum II	2
CRS3383	School Psychology Practicum III	2
CRS3485	School Psychology Internship 1	3
CRS3486	School Psychology Internship II	3
CRS3487	School Psychology Internship III	3
CRS3511	Applied Research and Program Evaluation	
	in School Psychology	2

Total number of courses: 16
Total number of credits: 44 QH

The CAGS program requires successful completion of the comprehensive examination. The typical length of the program is two years.

The combined MS and CAGS program consists of thirty-one courses, a minimum of ninety quarter hours, and successful completion of the comprehensive examination. The typical length of the program is three years.

# Counseling Psychology, Certificate of Advanced Graduate Study

This post-Master's degree program is designed for students who have already completed a one-year Master's degree in counseling or psychology and who wish to develop further their knowledge of theory and practice. The certificate allows graduates to pursue advanced counseling positions. A one-year field placement is required, as is the successful completion of a comprehensive examination.

#### **Admission Requirements**

One year of experience in a counseling-related field is preferred; G.P.A. of 3.0 or above; above average GRE or MAT scores; Masters in Counseling Psychology or related field.

Required Courses		
CRS3331	Case Studies in Marriage and Family	
	Counseling	3
CRS3337	Advanced Group Counseling	3
CRS3338	History and Systems of Psychology	3
CRS3339	Contemporary Theories of Psychotherapy	3
CRS3341	Psychodiagnostic Measures	3
CRS3488	Advanced Fieldwork I	3
CRS3489	Advanced Fieldwork II	3
CRS3490	Advanced Fieldwork Ill	3
Elective		4

Total number of courses: 13
Total number of credits: 40 QH

The CAGS in Counseling Psychology includes successful completion of a comprehensive exam. The typical length of the program is two years full time.

# SCHOOL AND COUNSELING PSYCHOLOGY, DOCTOR OF PHILOSOPHY

The practitioner/scientist PhD in School and Counseling Psychology includes theory and research from the behavioral science of psychology integrated with professional fieldwork practice. The program is designed to meet accreditation guidelines of the American Psychological Association (APA) and licensure requirements in the Commonwealth of Massachusetts. School and counseling psychology are viewed as addressing contextualized human development over the life span and developmental and situational crises. The theoretical perspective in the program is integrative and eclectic, with multiple levels of intervention. Students are expected to graduate in four to five years beyond a master's degree from this full-time program. They will be prepared for remediative, preventive, and health-promoting clinical practice with culturally diverse children, youth, adults, and families in schools, colleges, and mental health settings.

### **Theoretical Orientation**

The School and Counseling Psychology PhD is philosophically based on an ecological model. This model focuses on the contexts in which people and their environments intersect. These contexts include the families, groups, cultures (gender, race, ethnicity, socio-economic class) and the social, political, and economic institutions that affect individuals. Thus, the ecological model includes individuals, their families, their school, work, and sociocultural environments. It employs a general systems perspective to understand the mutually reciprocal interactions of all of these elements. This ecological orientation provides the lenses through which students study psychology and counseling theory and research. In their fieldwork settings, they have the opportunity to translate this orientation into practice.

#### Requirements for Admission

The deadline for applications is February 1st. The credentials of each applicant to the Doctoral Program in School and Counseling Psychology are reviewed by the faculty to assess the likelihood of the individual's successful completion of the program and his/her ultimate contribution to the field of psychology and the community at large. Candidates are expected to meet the following basic requirements:

- eligible for certification as a School Psychologist (School Psychology applicants);
- a strong undergraduate record (3.0 average preferred):
- a strong graduate record in counseling or school psychology or related degree (3.5 average preferred);
- scores of 600 on verbal and 600 on the quantitative sections of the GRE preferred;
- two years of related clinical experience for counseling, one year for school psychology;
- · personal statement of goals and expectations,
- minimum of three letters of recommendation (at least one from a professor);
- · personal interview with program faculty.

Admission will be based on the evaluation of demonstrated academic performance, academic aptitude, quality of recommendations, previous relevant experience, and faculty assessment.

#### **Program Requirements**

Counseling Psychology track students are required to take a minimum of twenty-nine courses and eighty-nine quarter-hour credits, and School Psychology track students are required to take a minimum of twenty-one courses and sixty-five quarter-hour credits. All students must pass four comprehensive examination questions, complete their advanced fieldwork and internship, and write a dissertation.

#### Fieldwork and Internship

In addition to academic courses, students will be expected to complete nine months of Advanced Fieldwork, typically twenty hours per week, usually during their second year of study, and a calendar year of full-time doctoral internship (or two years of half-time internship) in an APA approved setting or its equivalent. Students are supervised at their fieldwork and internship sites by site-based supervisors who must have the appropriate credentials. In addition, they receive small-group supervision by university faculty. Before beginning their internship, students must have successfully completed all components of the comprehensive examinations and all academic work.

#### **Prerequisite Graduate Courses**

Counseling Psychology Track

(Prerequisite courses may be waived or completed at Northeastern University.)

- one counseling theory course and one counseling strategies course
- assessment course which gave an overview of tests and test usage, and one course measuring intelligence and cognition
- · one group counseling course
- · one vocational counseling course
- · one research design course and one statistics course
- · one family counseling course
- one year (700 hours) of supervised practicum with at least one hour per week individual supervision

## School Psychology Track

(Prerequisite courses may be waived or completed at Northeastern University.)

- two counseling theory or intervention courses
- three assessment courses, at least one of which must be an overview of tests and test usage
- · one research design and one statistics course
- · one course in family counseling
- one year (600 hours) of supervised internship in a school with at least one hour per week of individual supervision
- · two courses in learning theory
- · one course in neuropsychology
- one course in cross-cultural counseling
- one course in developmental psychology
- · two courses in special education
- one seminar in school psychology must include substantial emphasis on ethical and legal standards
- · one course in consultation
- · one course in behavior modification

# Counseling Psychology Track

# School Psychology Track

Required G	raduate Courses	QH	Required G	raduate Courses	QH
CRS3358	Doctoral Seminar in Counseling and School		CRS3338	History and Systems of Psychology	3
	Psychology	3	CRS3353	Human Neuropsychology I	3
CRS3386	Legal and Ethical Issues in Professional		CRS3339	Contemporary Theories of Psychotherapy	
	Psychology (Doctoral Section)	3		(Doctoral Section)	3
CRS3514	Intermediate Research Design and Analysis	3	CRS3340	Rorschach	3
CRS3809	Doctoral Dissertation	3	ED3341	Intermediate Educational Statistics	4
ED3341	Intermediate Educational Statistics	4	CRS3355	Child Psychotherapy	3
ED3349	Computer Applications in Multivariate		CRS3336	Organizational Behavior in Human Services	3
	Statistics	4	ED3343	Advanced Research Design	4
CRS3338	History and Systems of Psychology	3	CRS3310	Psychopathology I (Doctoral Section)	3
CRS3353	Human Neuropsychology 1	3	CRS3311	Psychopathology II (Doctoral Section)	3
CRS3354	Human Neuropsychology II	3	SOC3135	Issues in Social Psychology	3
CRS3342	Learning Principles and Application 1		CRS3358	Doctoral Seminar in Counseling and School	
	(Doctoral Section)	3		Psychology	3
CRS3343	Learning Principles and Application II		ED3349	Computer Applications in Multivariate	
	(Doctoral Section)	3		Statistics	4
SOC3135	Issues in Social Psychology	3	CRS3386	Legal and Ethical Issues in Professional	
CRA3359	Community Psychology or			Psychology (Doctoral Section)	
CRS3336	Organizational Behavior in Human Services	3	CRS3488	CRS3488 Advanced Fieldwork I	
CRS3310	Psychopathology I (Doctoral Section)	3	CRS3489	89 Advanced Fieldwork II	
CRS3311	Psychopathology 11 (Doctoral Section)	3	CRS3490	90 Advanced Fieldwork III	
CRS3357	Life Span Development (Doctoral Section) or		CRS3809 Doctoral Dissertation		3
CRS3355	Child Psychotherapy	3	CRS3860	Doctoral Internship I	3
CRS3340	Rorschach	3	CRS3861	Doctoral Internship II	3
CRS3387	Cross-Cultural Counseling or		CRS3862	Doctoral Internship III	3
CRS3356	Feminist Therapy	3	CRS3799	PhD Continuation	(
CRS3339	Contemporary Theories of Psychotherapy				
	(Doctoral Section)	3	Total num	ber of courses: 21	
CRS3488	Advanced Fieldwork I	3	Total num	ber of credits: 65 QH	
CRS3489	Advanced Fieldwork II	3			
CRS3490	Advanced Fieldwork III	3			
CRS3860	Doctoral Internship I	3			
CRS3861	Doctoral Internship II	3			
CRS3862	Doctoral Internship III	3			
CRS3337	Advanced Group Counseling	3			
CRS3331	Case Studies in Marriage & Family				

3

Total number of courses: 29
Total number of credits: 89 QH

(Doctoral Section)

Vocational Psychology Psychodiagnostic Measures

CRS3318

CRS3341

SCHOOL AND COUNSELING PSYCHOLOGY DOCTORAL PROGRAM ACADEMIC POLICIES

### **Grade Requirements**

Doctoral students and doctoral degree candidates must maintain a B (3.0) average. No additional course credits are allowed to satisfy the required B (3.0) average. A student who receives a grade lower than a B (3.0) in three or more classes is not permitted to continue in the program. In addition, a student who accumulates two grades of C (2.0) from the same faculty member may not register for a third course with this faculty member. A student who receives a grade of F or U in a course must make up the course according to the advisor's recommendation. A student receiving a grade of F or U in more than one course is not permitted to continue in the program.

#### Course Waivers

The purpose of the waiver process is 1) to minimize the possibility that a student will be required to complete courses that are equivalent to previous educational or professional experience; and 2) to ensure that students have attained proficiency in the content areas encompassed by the proposed waived course. Another graduate-level course must be substituted for each waived course. Consult with your advisor in choosing these courses.

### **Comprehensive Examination**

The doctoral degree candidate must satisfactorily demonstrate breadth and depth of knowledge in the areas of intervention, assessment, research, and professional issues. The written comprehensive examination consists of one question in each of these four areas. It is expected that two questions will be completed at the end of the first year of academic study and the remaining two by the end of the second year of academic study. A student who fails the comprehensive examination will be given one additional opportunity to retake the exam. Failure to pass the comprehensive examination twice will result in the student's withdrawal from the doctoral program.

## Dissertation

As part of the doctoral program, each candidate must satisfactorily complete a dissertation that embodies extended and creative independent research as well as proper evaluation and interpretation of the results. The dissertation committee, comprising three faculty members, two of whom, including the chair, must be from the core school and counseling psychology doctoral program faculty, must approve the dissertation proposal and defense.

#### **Final Oral Examination**

The final oral examination, which is administered after the student has completed all other requirements for the degree, covers the subject of the doctoral dissertation and significant developments in the area of specialization.

#### **Residency Requirement**

Doctoral students are required to spend the equivalent of at least one year in residence at the university in full-time graduate study.

# **Course Descriptions**

The following courses are offered through the Department of Counseling Psychology, Rehabilitation, and Special Education (CRS). Both doctoral and non-doctoral sections of courses are offered. A complete course listing for Bouvé College of Pharmacy and Health Sciences is available in the Graduate Office (203 Mugar). Courses listed in this catalog are subject to change through the normal academic channels. As new courses are offered and changes are made, an updated supplemental listing is available in the graduate office. Each college publishes graduate course offerings. If you want to take courses outside the CRS Department and have the approval of your faculty advisor, please contact the applicable college for a listing of its course offerings and descriptions. Typically students may take classes offered in the College of Arts and Sciences and the College of Business.

# CRS 3301 Educating Individuals with Learning

Surveys academic, behavioral, and socio-emotional characteristics of children and youth who manifest specific difficulties in perceptual, integrative, or expressive processes that impair learning. Analyzes current service delivery programs, individual learning styles, and related curriculum materials for preschool-through high-school-aged students with learning disabilities and other learning problems. *Previously CRS 3401* 

# CRS 3302 Vocational Development and Occupational Information

Deals with the ways in which individuals make decisions concerning their choice of vocation and the kind of data needed to assist people with these decisions. Considers these data in the relationship of social and economic change to occupational trends; the classification and description of occupational fields; methods of collecting, evaluating, filing, and disseminating vocational information; and the role of the counselor in fulfilling these functions.

Previously CRS 3502

### CRS 3303 Counseling Theory and Process

3 QH

3 QH

3 QH

Provides students with a basic cognitive understanding of several major theoretical approaches to counseling. Helps them to develop listening, understanding, and communications skills and to probe further their own self-understanding as counselors. Discusses and stimulates these skills and understandings in the context of a variety of settings with a variety of clients. Uses role playing, case material, and audiovisual materials. During fall quarter, open only to departmental degree students. *Previously CRS 3503* 

#### CRS 3304 Education of Individuals with Behavior Disorders 3 QH

Studies the various theories, programs, and approaches dealing with emotional disturbance. Emphasizes the role of the educator as it relates to the therapeutic management of individuals and groups displaying problems in socio-emotional development. Discusses parent-teacher interaction.

Previously CRS 3404

#### CRS 3305 Group Dynamics

ynamics 3 Q

Emphasizes the understanding of group development and the behavior of individuals in group settings. Includes coverage of leadership, membership, norms and boundaries, power, decision making, conflict resolution, and the use of humor in groups. Students participate in group activities, learn to analyze group dynamics, and lead discussion and training groups. *Previously CRS 3405* 

#### CRS 3306 Psychological Testing

3 QH

Discusses the principles and problems of psychological testing as applied to the work of the counselor. Considers psychometric concepts such as validity, reliability, and standardization applicable to the use, understanding, and interpretation of test scores. Gives students the opportunity to become familiar with the most frequently used group tests of intelligence, aptitude, achievement, interest, and personality. Evaluates tests for use in diagnosis and in the understanding of human behavior, with an emphasis on their interpretation. *Previously CRS 3501* 

#### CRS 3307 Group Counseling

3 QH

Introduces theories, principles, and techniques of group counseling from various theoretical perspectives and with varying groups. Involves students in a genuine group-counseling experience in order to understand the phenomenon of group experience.

\*Previously CRS 3507\*

#### CRS 3309 Introduction to College Student Development 3 QH

Covers various theories of cognitive, psychosocial, and moral development that pertain to college students. Involves special emphasis on developmental theories that describe identity formation specific to subdominant groups such as women, African Americans, Asian Americans, Latinos, gays and lesbians, and disabled persons. Discusses the demographics of college student populations, the integration of cognitive and affective education, and the creation of community on college campuses.

Previously CRS 3508

#### CRS 3310

#### and 3311 Psychopathology I and II 3 QH each

Considers the major forms of psychopathology, including the neuroses, personality disorders, affective disorders, eating and substance abuse disorders, psychophysiological reactions, and the psychoses. This course discusses psychopathology from a developmental and object-relations perspective, a biological perspective, and the more descriptive approach to DSM-IV.

Previously CRS 3610 and CRS 3611

#### CRS 3312 Psychology of Individuals with Special Needs 3 QH

Studies the social and emotional adjustment of individuals with disabilities and the psychological significance of cognitive, sensory, and motor variations. Evaluates relevant legislation, the effects of limitations imposed by the attitudes of society, the attitudes of individuals toward their disabilities, and the effect of the disability itself. Discusses implications for educational programs and life span management. This course should be among the first taken in the special education sequence.

Previously CRS 3412

# CRS 3313 Psycho-educational Assessment and 3 QH Screening Preschoolers

Focuses on the psychological and educational assessment of preschoolers as conducted by psychologists. Discusses history, issues, and current status of preschool assessment. Introduces students to the major tests and measures used at this age level.

Previously CRS 3612

#### CRS 3314 Program Strategies in Student and Staff Development

3 QH

3 QH

Focuses on assessing developmental needs of college students and designing, delivering, and evaluating educational programs that address those needs. Gives special attention to understanding diversity within student and staff populations. Examines significant life experiences that affect individual development patterns including race and ethnicity, gender, age, disability, and sexual orientation. *Prereq: CRS 3309. Previously CRS 3615 with prereq. of CRS 3508* 

#### CRS 3315 Assessment in Special Education

Offers a field-based course that gives students the opportunity to learn to administer selected norm-referenced tests for special needs populations, determine which tests will yield the most information in a variety of case studies, and interpret data from a minimum of four norm-referenced test batteries.

Previously CRS 3415

# CRS 3316 Curriculum-Based Assessment and 3 QN Instruction for Educators

Offers a course with extensive field-based components that focus on the understanding, development, and implementation of individualized educational programs, including the development of curricula-based assessments, task analyses, annual goals, and short-term objectives having to do with academic, behavioral, and social/emotional interventions. Includes educational strategies and their application in classroom management and the adaptation and selection of a variety of materials and strategies.

Previously CRS 3416

## CRS 3317 Consultation Seminar 3 QH

Offers a review of various consultation models, including behavioral consultation, process consultation, and systems consultation. Examines current research in the field of counseling consultation. Emphasizes the development of a personal consultation style and the enhancement of consultation skills. *Prereq:* CAGS standing or permission of instructor. *Previously CRS 3517* 

### CRS 3318 Vocational Psychology

3 QH

Focuses on career counseling issues, didactic instruction in career development theory, and the selection of interventions in vocational/leisure counseling. Includes such learning activities as case studies, audio/videotapes in career counseling sessions, and class discussion of problems and their solutions from theoretical perspectives. *Prereq:* Doctoral standing or permission of instructor.

\*Previously CRS 3518\*

#### CRS 3319 Practicum in Special Education

3 QH

Pre-Practicum: The pre-practicum shall be a minimum of seventy-five clock hours of monitored field-based training. The purpose of the pre-practicum is to provide acquaintance with school and classroom environments and prepare the student for the practicum.

Practicum: The practicum must be in the role and at the level of the certificate sought. It must consist of a minimum of 150 hours, earned at the practicum site. At least 135 hours must involve direct instructional responsibilities. There will be on-campus seminars in conjunction with the practicum experience.

Previously CRS 3419

12

Develops students' understanding of human resource counseling as a rapidly developing area of applied psychological work in a variety of organizational settings. Considers human resource counseling as a potentially significant social movement for facilitating employee well-being and occupational competence. Surveys basic applied psychological practices employed in human resource development programs. Considers future trends in human resource program development as well as the continuing educational needs of professional counselors. *Prereq:* CRS 3306 and CRS 3303.

CRS 3324 Etiology and Development of Special Needs 3 QH

Previously CRS 3620 with prereq. of CRS 3501 and CRS 3503

Explores factors that primarily affect deviations in cognitive, motoric, emotional, and physical development. Uses understanding of these factors to discuss multidisciplinary life management issues. Discusses psychological, psychodynamic, and learning theory approaches and relates them to problems of life span management. Previously CRS 3424

# CRS 3325 Parent and Family Counseling 3 QH

Focuses on a conceptual understanding of family systems theory and its application to and implications for family counseling. Presents structural, communicative, and strategic approaches to marital, parent, and family counseling. Studies the family as an interactional system, a seedbed of distress and health. Provides the opportunity to become familiar with family assessment, counseling skills, and strategies. *Prereq:* CRS 3303.

Previously CRS 3525 with prereq. of CRS 3503

# CRS 3326 Organization and Administration of 3 QH Student Services

Surveys of the range of services typically offered by student service departments and divisions. Includes discussion of leadership, staff hiring, supervision, finance, interdepartmental collaboration, and enrollment management. Involves guest lecturers who are department heads within the most important types of student service offices. *Previously CRS 3526* 

# CRS 3327 Seminar: Neuropsychology of Learning 3 QH and Behavior Disorders

Through critical review of the literature, analyzes and discusses varied neuropsychological interpretations of the nature of learning and behavior disorders. Topics include biochemical and physiological correlates, cognitive and perceptual factors, genetic and maturational variables, hemispheric specialization, and the implications of drug studies. Considers implications of the above for the education and serving of special needs individuals, useful to administrators, teachers, counselors, reading specialists, school psychologists, and those in allied health fields. Expects students to give a presentation in an area related to the seminar topic. *Prereq:* CRS 3301.

Previously CRS 3427 with prereq. CRS 3401

#### CRS 3328 The Severely Disabled 3 QF

Reviews causes of disabling conditions and considers the implications of severe multiple disabilities in home, educational, and community settings. Offers students a chance to develop a case study of a person with severe disabilities in conjunction with reviewing relevant literature, visiting community facilities, and interviewing a family with a member with severe disabilities.

# CRS 3329 Assessment and Program Development 3 QH for the Severely Disabled

Includes the observation of persons with severe disabilities in the classroom and community; demonstration of evaluation and assessment techniques; and analysis of development, educational, and rehabilitation plans for persons with severe disabilities.

Previously CRS 3429

Previously CRS 3428

Helps students design and implement behavior management programs for children, youths, and adults with and without disabilities. Synthesizes the theoretical aspects of behavioral psychology in various field-based projects. Allows students to work with individuals, including those with varying disabilities, in order to pinpoint target behaviors, chart baseline and intervention data, use appropriate reinforcement schedules, and reinforce and evaluate necessary program changes. Serves as the field-based course required for all special needs and intensive special needs majors. *Prereq:* Appropriate background in learning theory.

Previously CRS 3430

# CRS 3331 Case Studies in Marriage and Family Counseling 3 QH

Presents an advanced-level course for those with previous experience or preparation in marriage and family counseling. Emphasizes the preparation of case studies of family and marriage histories and current functioning as well as the design of service, counseling, and referral programs based upon comprehensive studies of needs and resources. Special attention is paid to variant normative family types. *Prereq:* CRS 3325.

Previously CRS 3531 with prereq. of CRS 3525

#### CRS 3332 Seminar in School Psychology

3 QH

Provides an intensive analysis of philosophical, historical, technical, and school administrative issues contributing to the professional identity and consultative function of psychologists in an educational milieu. Emphasizes ethical and legal standards and their implementation in practice. Uses simulations, case studies, and research projects to study these issues. *Prereq:* CAGS students in school psychology or permission of instructor.

Previously CRS 3532

#### CRS 3333 Introduction to Rehabilitation

3 QH

Provides an orientation to the field of rehabilitation, including its historical development, legislative involvement, psychological implications, and sociological dimensions. Emphasizes coordinating and integrating services as they relate to the field of rehabilitation as a community process. Focuses on persons with severe disabling conditions.

Previously CRS 3433

#### CRS 3334 Principles of Medical Rehabilitation

3 QH

Explores the wide spectrum of disabilities that could profit from rehabilitation, including orthopedic, neurological, medical, surgical, and mental disabilities. Presents basic principles of medical rehabilitation that administrators should know. Discusses psychological aspects of disability.

Previously CRS 3434

# CRS 3335 Individual Intelligence Testing

4 QH

Offers preparation to administer, score, and interpret the Stanford-Binet IV, the Wechsler family of tests, and the Kaufman Assessment Battery for Children. Considers the theories of intelligence upon which the tests are based and the use of the tests in educational and clinical settings. Requires students to administer, score, and interpret tests, including some from each of the three tests covered in the course. *Prerea*: CRS 3306.

Previously CRS 3534 with prereq. of CRS 3501

### CRS 3336 Organizational Behavior in Human Services 3 QH

Examines the body of conceptual and theoretical knowledge regarding organizational theory. Examines formal and informal organizations, organizations as social systems, status and role concepts, leadership in organizations, power structure, relationships to authority. decision making, and communication in and between organizations.

\*Previously CRS 3436\*

Considers a broad range of approaches, including but not limited to

Emphasizes the development of strategies designed to help alleviate typical school-related and developmental problems such as low

achievement, indecisiveness, negative self-identity, and disruptive

parents, and administrators in effecting positive behavior change.

behavior. Considers the counselor's role as a consultant to teachers,

Intended primarily for students who will counsel in school settings or

other settings serving children and adolescents. Prereq: CRS 3303.

behavior modification, Adlerian, and Reality Therapy strategies.

3 QH

Emphasizes developing advanced skills in group leadership and counseling. Involves students as leaders and participants in a group counseling experience. *Preveq:* CRS 3307.

Previously CRS 3536 with preveq. of CRS 3507

### CRS 3338 History and Systems of Psychology

3 QH

3 QH

Surveys at an advanced level major developments in Western intellectual traditions and the philosophical underpinnings of psychology. Addresses exclusions and limits within dominant paradigms. *Prereq:* Doctoral standing or permission of instructor. *Previously CRS 3538* 

#### CRS 3339 Contemporary Theories of Psychotherapy

CRS 3345 Vocational Counseling Strategies

Previously CRS 3527 with prereq. of CRS 3503

Explores in depth the conceptual clinical elements of contemporary psychoanalytic, cognitive, social learning, existential, and systemic theories of personality and behavior change. Includes selected readings, lectures, and student discussion. Evaluates critical issues and future directions of contemporary theoretical schools and considers which types of therapies may be suitable for certain types of clients at specific periods of their lives. Critically examines the gender, class, and cultural adequacy of the different theories. *Prereq:* CRS 3307 and CRS 3350. *Previously CRS 3539 with prereq. of CRS 3507 and CRS 3530* 

Examines the individual's role expectations in the world of work from a developmental perspective. Sets forth a systematic program to foster vocational self-awareness. Studies vocational counseling that deals with the entire individual, including focuses on values, underlying psychological needs and drives, and the influence of environment on level of development and career awareness. Intended for a variety of client populations, from adolescence through adulthood. *Prereq*: CRS 3303.

Studies the dynamics of moving the rehabilitation client into the world

Considers the development of facility in the use of resource materials in

appraisal, training, and vocational assessment. Discusses, analyses, and

occupational information, job description and analysis, performance

of work, within the framework of a specific community structure.

Previously CRS 3528 with prereq. of CRS 3503

Occupational Placement

#### CRS 3340 Rorschach

CRS 3343

3 QH

CRS 3346

Offers an advanced course in psychodiagnostic testing, focusing on the Rorschach test. Teaches the administration, scoring, and interpretation of this test, using the Exner scoring system. Integrates Rorschach data with data from other sources, such as personal history. Trains students to provide clear, pertinent feedback and recommendations. Assumes knowledge of the theory and practice of psychodiagnosis. *Prereq:* Doctoral standing or permission of instructor.

Previously CRS 3540

# develops more effective placement practices for the disabled individual. Previously CRS 3446

3 QH

CRS 3347 Health Issues 3 QH
Analyzes selected major physical and emotional health issues in the health field. Emphasizes the importance of current research findings to health programs in a variety of settings.

Previously CRS 3447

## CRS 3341 Psychodiagnostic Measures

3 QH

Offers an advanced-level course in clinical assessment. Places heavy emphasis on differential diagnosis and personality description using data from a variety of sources — interviewing, case histories, and objective and projective testing. May include the Thematic Apperception Test, the California Psychological Inventory, MMPl. Bender-Gestalt, Early Memory Test, Sentence Completion Tests, and Draw-A-Person Test. Requires students to administer and interpret psychological test data and to report their findings in a psychological report. *Prereq:* CRS 3306 and CRS 3335.

Previously CRS 3541 with prereq. of CRS 3501 and CRS 3534

# CRS 3348 Rehabilitation Counseling Strategies

3 QH

Emphasizes the roles and functions of the rehabilitation counselor, relevant issues in the field, and an overview of the rehabilitation process. Examines special problems and techniques of counseling with the person with disabling conditions (physical, mental, and behavioral disorders) through case studies and role playing. Covers disability in the context of social deviance and psychosocial approaches to understanding human behavior, including self-concept, social role theories, and rational behavioral approaches. *Prereq:* CRS 3303. *Previously CRS 3529 with prereq. of CRS 3503* 

# CRS 3342 Learning Principles and Applications I

3 QH

Analyzes principles of learning from behavioral and cognitive psychology and their applications to the process of educational and therapeutic interventions. Stresses educational and clinical settings. *Previously CRS 3608* 

#### ....

3 QH

Analyzes principles of learning from behavioral and cognitive psychology and their applications to the process of educational and therapeutic interventions. Stresses educational and clinical settings. *Previously CRS 3609* 

Learning Principles and Applications II

# CRS 3349 Psychological Problems of Disability

3 QH

Offers an advanced course in psychopathology as it relates to the impact of disability on personality. Studies in depth individuals with moderate and severe disabilities from the viewpoint of psychosocial factors, interpersonal relationships, and cognitive versus noncognitive functioning in those with motor and sensory disabilities; problems of dependency and motivation; psychosomatic factors. Discusses the role of treatment and rehabilitation.

Previously CRS 3449

#### CRS 3350 Psychological Counseling Strategies

3 QH

Focuses on a variety of change strategies appropriate for older adolescents and adults. Intended for those working with client populations in mental health settings and college counseling centers. *Prereq:* CRS 3303.

Previously CRS 3530 with prereq. of CRS 3503

#### CRS 3351 **Essentials of Case Management Supervision**

Considers the relationship between case management and casework supervision. Topics include the dynamics of the communication process, decision making, conflict resolution and compliance, management of resources external to the organization, structural and functional analysis of the supervisory process, and caseload management.

#### 3 QH CRS 3352 Rehabilitation of the Alcoholic and **Drug Dependent**

Studies comprehensive factors, including the nature of etiology dynamics involved in alcohol and drug dependency; techniques for evaluation; and rehabilitation administration, planning, and treatment. Previously CRS 3452

#### CRS 3353 Human Neuropsychology I

3 QH

3 OH

Explains brain/behavior relationships and acquaints students with the language and frame of reference of neuropsychology, Introduces neuroanatomy, the topography of the cerebrum, brain stem, and cortospinal system. Covers different theories and approaches to understanding brain/behavior relationships and significant clinical disorders such as alcoholism, aging, epilepsy, language deficits and apraxias, and memory disorders and learning disabilities. Prereq: Doctoral standing or permission.

Previously CRS 3553

#### CRS 3354 Human Neuropsychology II

3 QH

Describes the neuropsychological assessment of adults and children, a rationale for undertaking such an assessment, the sorts of questions that can be addressed, and appropriate tests and techniques. Covers topics such as laterality, effects of psychiatric disorders, and childhood disorders through a critical review of the literature and research. Prereq: CRS 3353.

Previously CRS 3554 with prereq. of CRS 3553

#### CRS 3355 Child Psychotherapy

3 QH

Provides students with a basic understanding of child development, psychopathology, and modes of psychotherapy with children. Addresses the importance of working with parents and school systems. Through class discussions and readings this course helps students develop a sense of how to consult with parents and schools. Prereq: CRS 3303 or permission of instructor.

Previously CRS 3555 with prereq. of CRS 3503

#### CRS 3356 Feminist Therapy

3 QH

3 QH

Examines the psychology of women, sex roles, gender socialization, and feminism at an advanced level. Emphasizes the analysis of traditional theory, psychopathology, and treatment from a feminist perspective. Prereq: CRS 3339 or permission of instructor, Previously CRS 3556 with prereq. of CRS 3539

#### CRS 3357 Life Span Development

Develops understanding of biopsychosocial issues in the adult life span, the implications for counseling adults as they pass through the stages of human development, and the reciprocal impacts of individual, family, and career. Gives special attention to gender, class, racial, and crosscultural variables affecting individual and family functioning in larger social systems. Studies clinical interventions in the context of contemporary psychological theory and research. Prereq: CRS 3325. Previously CRS 3557 with prereq. of CRS 3525

#### **CRS 3358 Doctoral Seminar in Counseling and** 3 QH School Psychology

Seeks to prepare doctoral students to analyze critically their discipline and profession at an advanced level. Identifies and analyzes current research findings, professional trends, and disciplinary assumptions. Prereg: Doctoral standing.

Previously CRS 3558

#### CRS 3359 Community Psychology

3 QH

Introduces the history and conceptual base of community psychology, Discusses crisis theory, prevention, and ecological systems theory. Presents consultation skills, model community programs, and women's and minority issues. Masters/CAGS and Doctoral sections available. Previously CRS 3559

#### CRS 3361 **Counseling Psychology Practicum**

3 QH

Involves fieldwork placement consistent with students' major professional goals and/or settings in which they intend to work. Extends across the academic year from September to June and requires a minimum of twenty hours per week, or the equivalent, in the fieldwork setting. Includes seminars that will meet, subject to change, twenty-two times during the year. Provides supervision in the field setting. Previously CRS 3560

#### CRS 3362 and 3363 MSCP Internship I and II Continuation of 3 QH each CRS 3361 and CRS 3362

Previously CRS 3561 and CRS 3562

#### CRS 3364, 3365 and 3366 Human Resource Counseling Practicum I, II and III

3 QH each

Involves fieldwork placement that extends across the academic year from September to June and requires a minimum of 300 hours for the year. Includes seminars that will meet, subject to change, twenty-two times during the year. Provides supervision in the field setting. Previously CRS 3563, CRS 3564, and CRS 3565

#### CRS 3367 **Curriculum-Based Assessment and Instruction** 3 OH

Provides training and supervision in the collection and analysis of data on a student's cognitive, affective, and interpersonal needs and the development of educational plans. Includes discussion of instructional methods and strategies for use with children with disabilities. Prereq: CRS 3301.

Previously CRS 3533 with prereq. of CRS 3301

#### CRS 3368 **Early Intervention: Family Systems**

3 QH

Introduces students to the theory and practice of family interventions with a diverse population including infants, toddlers, and preschoolers with special needs. Family systems, developmental, coping, crisis, and ecological theories and practices are discussed. Assessment and intervention skills are strategies presented and taught. Theories of exceptionality as they pertain to family systems are integrated into course material.

#### CRS 3369 Early Intervention: Infant/Toddler Development 3 QH

Introduces students to the major theories of development and their implications for intervention, Infant/toddler development in the areas of cognition, language and communication, perceptual/motor, personal, social, and self care areas will be presented and integrated with the impact of specific disabilities and varying risk factors on development. The impact of culture on the perception of risk in development will be infused throughout.

#### **CRS 3370** Foundations in Psychology and College 3 QH Student Development and Counseling

Provides a philosophical and theoretical background for beginning graduate students in college student development and counseling. Clarifies the students' professional role and promotes the development of a professional identity and self understanding through study and discussion of established theories of helping and through selfexploration of one's personal value system. Previously CRS 3500

#### 3382 and 3383 School Psychology Practica I, II, and III 2 QH each

Constitutes the fieldwork required for school psychologist provisional certification. Places students in an N-12 school system working under the supervision of a certified school psychologist. Continues for two days a week across the academic year from September to June. Teaches students to perform psychological evaluations, counseling, consultation, and other appropriate activities. Includes seminars that meet for twenty-two sessions during the year to provide skill training and discuss role functions. Gives students one hour of supervision per week from the field site supervisor. Students must complete, either separately or combined, seventy-five hours of pre-practicum and 600 hours of practicum experience. Students must submit an application for a practicum by April 1 for approval for the course that begins in the following fall quarter.

Previously CRS 3575, 3576, and 3577

#### CRS 3384 Human Sexuality

3 QH

This course serves to give up-to-date information on current issues in human sexuality and will be a forum for the discussion of trends in the field, including AIDS, birth control, abortion, ethics and morality in genetic engineering, sex education in the school and home, teen sexuality and pregnancy, social aspects of date rape, early sexual experiences, divorce, and remarriage.

Previously CRS 3584

#### CRS 3385 Reality Therapy

3 OH

Offers practice in applying reality therapy and control theory principles and gives assistance in developing a plan to implement those principles in professional work. Designed for teachers, administrators, and human service professionals in the health care field, including counselors, psychologists, nurses, and therapists.

\*Previously CRS 3633\*

### RS 3386 Legal and Ethical Issues in Professional Psychology 3 QH

Provides a systematic orientation to the legal and ethical issues encountered by mental health practitioners in their teaching, research, and clinical practice.

Previously CRS 3551

#### CRS 3387 Cross-Cultural Counseling

3 QH

Helps students develop beliefs/attitudes, knowledge, and skills that will contribute to their becoming culturally sensitive in their counseling and assessment practices. *Prereq:* CRS 3303 or permission of instructor. *Previously CRS 3552 with prereq. of CRS 3503* 

## CRS 3389,

#### 3390 and 3391 School Counseling Practica I, II, and III 3 QH each

Involves fieldwork placement which extends across the academic year from September to June and requires a total of 300 hours for the year. Includes seminars that will meet, subject to change, twenty-two times during the year. Provides valuable supervision in the field setting. *Prereq:* Approval of advisor.

Previously CRS 3566, 3567, and 3568

# CRS 3392, College Student Development 3 QH each 3393 and 3394 Practicum I, II, and III

Involves fieldwork in the placement which extends across the academic year from September to June and requires a total of 300 hours for the year. Includes seminars that will meet, subject to change, twenty-two times during the year. Provides supervision in the field setting. *Previously CRS 3569, CRS 3570, CRS 3571* 

# CRS 3395, Rehabilitation Counseling 3396 and 3397 Practicum I, II, and III

3 OH each

Offers a supervised counseling experience extended over the academic year. Emphasizes small group seminars dealing with counseling and other related matters in fall quarter; the supervised counseling assignment in winter and spring quarters assigns practicum settings according to the student's major area of concentration. Requires students to make themselves available a minimum of two days per week during the academic year (October to June) for placement in a field setting. Stresses materials germane to the student's major. Includes twenty-two seminar meetings during the year. Students must successfully complete each practicum prior to commencing the next. Part-time students must submit an application for practicum (available from department) by April 1 for approval to enroll in practicum the following fall quarter. *Prereq:* CRS 3303 (may be taken concurrently with the beginning of practicum).

Previously CRS 3572 with prereq. of CRS 3503, CRS 3573, CRS 3574

#### CRS 3465 Research Methods and Design

3 QH

Studies experimental methods in detail, emphasizing critical analysis of published research reports and the implementation of these methods in service settings. Provides the opportunity to learn and evaluate observational measurement and data-collection techniques. Requires a feasible experimental design, with graphed actual or hypothetical data, which must be written in the form of a scientific report.

Prereq: Statistics.

#### CRS 3466, 3467, 3468, 3469, 3470

Applied Programming Seminar I, II, III, IV, and V

3 QH each

Allows students to design, test, and evaluate instructional programs for teaching specific subject matter for remedial application to behavior problems and to test instructional theory. Provides supervision through a weekly programming research and data seminar in collaboration with the student's advisor.

#### CRS 3471 Programmed Learning

3 QH

Reviews the history and theoretical and experimental bases of programmed instruction and errorless learning. Emphasizes the detailed analysis of stimulus control, its measurement, and ways to produce it.

## CRS 3472 Mental Retardation Seminar

нО

Provides an interdisciplinary seminar taught by faculty from the several Boston-area universities associated with the facilities affiliated with Northeastern University. Defines the role of each discipline in the care and treatment of retarded people and coordinates with the functions of other relevant disciplines. Includes specialties of communication disorders (Emerson College): dentistry (Tufts University); medical disciplines such as pediatrics, neurology, orthopedics, genetics (Massachusetts General Hospital, Harvard Medical School); nursing (Boston University); nutrition (Framingham Teacher's College); occupational therapy and physical therapy (Sargent College of Boston University); social work (Boston University and Simmons College); sociology (Brandeis University); special education (Boston University); and psychology (Northeastern University).

#### **CRS 3473**

#### and 3474 Behavior Intervention I and II

3 QH each

Focuses on behavioral intervention techniques. Emphasizes the functional analysis of behavior.

#### CRS 3475.

3476 and 3477 Advanced Learning Seminar I, II, and III 3 QH each

Covers contemporary research in operant conditioning, with emphasis on relating the techniques of behavioral analysis to problems of reinforcement, motivation, comparative psychophysics, and physiological psychology.

#### CRS 3478 Administration of Mental Retardation Services

Presents a comprehensive overview of general and specialized services for retarded individuals, from organizational and administrative points of view. Considers issues in planning and initiating new programs, service delivery, staffing, and economics. Includes visits to varied types of facilities in order to focus on administrative concerns.

# CRS 3479 and Systematic Inquiry Application 3 QH each 3480 Research I and II

Requires each student to collect a comprehensive bibliography on a significant topic in applied behavior research and complete a thorough review via written and oral presentations. Emphasizes the integration and analysis of experimental findings and theoretical foundations of the research area, the critical evaluation of current research, and the identification of potentially fruitful future work.

#### CRS 3481 Behavioral Change in Institutions 3 QH

Reviews projects that have successfully provided effective remediation and rehabilitation in institutions for the mentally retarded, the juvenile delinquent, and the developing individual.

#### CRS 3482 Community-Based Treatment

Focuses on the treatment of mentally retarded individuals in a community setting.

# CRS 3483 Biological Basis of Mental Retardation 3 QH

Considers the relationship between biological malfunction of the brain in particular and the defective learning ability and other behavioral abnormalities that constitute mental retardation. Aims toward as comprehensive a survey as time permits. Includes actual case presentations as illustrative examples.

#### CRS 3485,

3486 and 3487 School Psychology Internship I, II, and III 3 QH each Constitutes the fieldwork necessary for school psychologist full

constitutes in Technok Recessary for serious psychologist full certification. Students fulfill 1200 hours of fieldwork requirements. Includes twenty-two seminar meetings across the academic year, which consist of presentations of counseling, consultation, and assessment cases; skill and strategy training; and discussions of case management, including ethical and multicultural issues. Provides for students to practice under and receive two hours of supervision weekly from a certified school psychologist site supervisor. Submit application for fieldwork by April 1 for approval to enroll in fieldwork course the following fall quarter. Prereq: CRS 3381, CRS 3382, and CRS 3383. Previously CRS 3578, CRS 3579, CRS 3580 with prereq. of CRS 3575, CRS 3576, and CRS 3577

#### CRS 3488,

#### 3489 and 3490 Advanced Fieldwork I, II, and III 3 QH each

Involves fieldwork placement consistent with students' major professional goals and/or the settings in which they intend to work. Extends across the academic year (September to June) and requires a minimum of twenty hours per week, or the equivalent, in a supervised fieldwork setting. Includes twenty-two seminar meetings (number subject to change) during the year. Required for all counseling CAGS students. *Prereq:* CAGS/Doctoral standing in School and Counseling or the permission of advisor.

Previously CRS 3581

#### CRS 3509 Early intervention: Infant Assessment

3 OH

3 QH

The goal of the course is to have students learn how to conduct general developmental screenings of infants and toddlers; how to conduct language, gross and fine motor and social-emotional and adaptive assessment of infants and toddlers; how to interpret findings and recommend appropriate intervention to caregivers; and how to write reports describing assessment findings for parents and relevant educational and health care professionals. Teaching methodologies will include lectures, demonstrations by teachers and students, guest speakers, class discussion and supervision of test administrations. Teaching materials will include texts, films, and videotapes.

### CRS 3510 Practicum in Early Intervention I

3 QH

3 QH

The purpose of this practicum course is to provide students from school psychology, special education, speech and language pathology and audiology, and physical therapy with supervised fieldwork experience in team-oriented interventions for infants and toddlers and their families, from all groups including linguistic and cultural minority groups. The practicum class sessions are conceptualized as the linchpin training experience between what the theory addresses in didactic courses and the student's fieldwork. Students are expected to master early intervention and team participation core competencies to work effectively with families and children of diverse language and cultural backgrounds, school administrators and personnel, and interdisciplinary team members.

# CRS 3511 Applied Research and Program 2 QH Evaluation in School Psychology

The intent of this course is to promote skill with respect to designing, implementing, and communicating the results of applied research and program evaluation projects in school psychology. By means of applied research and program evaluation activities, school psychologists can have an important role in helping educational organizations make databased decisions regarding program development. In regard to research and program evaluation designs, the emphasis will be on *ex post facto* studies, simple quasi-experimental designs, and single case studies. In regard to data collection procedures, particular attention will be devoted to questionnaires, interviews, and reviews of documents. *Prereq:* Introductory Graduate Statistics and Research Design.

#### CRS 3512 Critical Issues in Rehabilitation

3 QH

3 OH

Explores and discusses the highly problematic issues of today's field. Among the issues are the breadth of the concept of disability, appropriate training sequences for the various rehabilitation disciplines, resolution of conflict over role overlap among disciplines, and appropriate models for service delivery systems. The most current and relevant research may be brought to bear upon these areas as well as knowledge from the reservoir of experience of instructors, visiting experts, and the student participants themselves. Students will be exposed to the issues as they exist in the profession and in the community. A theoretically oriented frame of reference will be brought to bear upon problems when feasible.

Previously CRS3455

#### CRS 3513 Practicum in Early Intervention II

This practicum will continue with the case study method developed in Early Intervention Practicum 1. Further integration of multidisciplinary skills and team building will be stressed. The integration of issues related to diversity, multiculturalism, and relevance of interventions will continue, along with strategies designed to empower parents and families. The development of techniques that allow parents to become strong advocates for their children with special needs will also be integrated into practicum discussions.

#### CRS 3514 Intermediate Research Design

Research is conducted in context. Data have meaning. The purpose of analysis in research is to clarify and summarize this context and meaning in the course of interpretation of the results of the study. Methodology in quantitative research will be compared with qualitative approaches, efforts will be made to illustrate the complementary nature of these traditions when used in research in applied psychology, rehabilitation, and special education. This course covers analysis and decision-making with experimental and other kinds of research data. Principal focus of the course is hypothesis testing using analysis of variance. *Prereg:* Introductory Graduate Statistics and Research Design.

#### CRS 3515 Community Service Learning

3 OH

3 QH

3 QH

Introduction to service learning methodology as a way of teaching and learning for life-long exploration of questions of civic responsibility, multicultural perspectives, societal norms, individual/group empowerment, and values clarification. Students are expected to assist in the development of the curriculum as it relates to their field and personal philosophy of community development and civic responsibility.

New course effective SP95

# CRS 3520 Normal Development in Childhood and Adolescence

Examines the inter-connectedness of the biological/neurological, socio/ emotional, and cognitive bases of child and adolescent development within the context of family, culture, race, class, gender, and sexual orientation. The course also evaluates these developmental issues in terms of historical and contemporary theories and research. New course effective WN96

#### **CRS 3585**

# and CRS 3586 Clinical Experience I and II 3 QH each

The special education clinical experience must be in the role and at the level of the certificate sought. It must integrate content-area knowledge and pedagogical theory and practice. A clinical experience must be, at minimum, 400 clock hours. Students must have completed the requirements for provisional certification prior to the clinical experience. The clinical experience will include 400 clock hours in an academic setting, on-campus seminar meetings, and a research project. New course as of FL94, previously one course split into two courses as required by Massachusetts Department of Education. *Previously CRS 3420 or CRS 3320* 

#### CRS 3635 Workshop in Counselor Education

3 QH

A special workshop in a specific field of interest offered from time to time. Emphasizes the development of instructional materials or the resolution of practical problems within a school or institutional setting. May also be held for a group of potential participants currently employed in a common field of work. Provides for possible graduate credit, which may not be applied toward a degree program at the University without the approval of the departments in which students are doing their major field of specialization degree work. *Prereq:* Degree candidate or special student in the graduate school; permission of workshop instructor.

Previously CRS 3806

## CRS 3797 PhD Continuation

0 ΩH

Offers continuation of dissertation work for doctoral candidates. *Previously CRS 3797* 

#### CRS 3798 MS Thesis Continuation

0 QH

Offers continuation of research/experimental work for the Master's thesis.

Previously CRS 3798

#### CRS 3799 EdD Continuation

0 QH

Offers continuation of dissertation work for doctoral candidates. Previously CRS 3799

#### CRS 3802 Directed Study

1 QH

Provided for the student whose unique academic needs or interests cannot be adequately satisfied in any of the scheduled courses of the Department. Not available to special students. *Prereq:* Approval of the chair of the Department and of the director of the Graduate School. Approval forms must be submitted during the quarter prior to registration for the directed study.

#### CRS 3803 Directed Study

2 QH

Provided for the student whose unique academic needs or interests cannot be adequately satisfied in any of the scheduled courses of the Department. Not available to special students. *Prereq:* Approval of the chair of the Department and of the director of the Graduate School. Approval forms must be submitted during the quarter prior to registration for the directed study.

#### CRS 3806 Institute in Special Education

3 QH

A special institute in a specific field of interest offered from time to time. May be collaborative (offered by several Departments of the College) and will usually include a special institute faculty drawn from resources outside the University and the College faculty. Focuses on a specific area of academic study and may be interdisciplinary in nature; involves time commitment of morning, afternoon, and evening sessions five or six days per week for one to eight weeks, depending upon the nature and scope of the institute. Designed customarily for participants who are currently employed in a common field of work and wish to receive additional preparation in new methods, materials, and content areas. Provides for possible graduate credit, which may not be applied toward a degree program at the University without the approval of the Department in which students are doing their major field of specialization degree work. *Prereq:* Degree candidate or special student standing in the Graduate School; permission of institute instructor.

#### CRS 3807 Directed Study

3 QH

Provided for the student whose unique academic needs or interests cannot be adequately satisfied in any of the scheduled courses of the Department. Not available to special students. *Prereq:* Approval of the chair of the Department and of the director of the Graduate School. Approval forms must be submitted during the quarter prior to registration for the directed study. *Previously CRS 3800* 

#### CRS 3809 Doctoral Dissertation

3 QH

This course will provide group discussions that will help students begin to work on their dissertation proposals. Individual meetings with the instructor and group sessions will be designed to assist students' proposal work on an individual basis. *Prereq:* Admission to candidacy in the Doctor of Philosophy degree program. A student will receive an Incomplete for this course until the dissertation is completed. *Previously CRS 3808* 

#### CRS 3810 Thesis

2 QH

Offers research/experimental work for the Master's thesis.

#### CRS 3811 Institute in Counselor Education

A special institute in a specific field of interest offered from time to time. May be collaborative (offered by several departments of the College) and will usually include a special institute faculty drawn from resources outside the University and the College faculty. Focuses on a specific area of academic study and may be interdisciplinary in nature; involves time commitment of morning, afternoon, and evening sessions five or six days per week for one to eight weeks, depending upon the nature and scope of the institute. Designed customarily for participants who are currently employed in a common field of work and wish to receive additional preparation in new methods, materials, and content areas. Provides for possible graduate credit, which may not be applied toward a degree program at the University without the approval of the Department in which students are doing their major field of specialization degree work. *Prereq:* Degree candidate or special student standing in the Graduate School; permission of institute instructor.

#### CRS 3860,

Previously CRS 3805

#### 3861 and 3862 Doctoral Internship I, II, and III

Required of all doctoral students in Counseling/School Psychology. Requires a minimum of forty hours per week for twelve months, for a total of 2,000 hours in the internship setting. Provides individual on-site supervision by a supervisor from the field site for at least two hours per week. *Prereq:* Advanced Fieldwork and doctoral standing. *Previously CRS 3850, CRS 3856* 

# CRS 3863 Doctoral Internship IV

Continuation of CRS 3862 Previously CRS 3853

### CRS 3864 Doctoral Internship V

Continuation of CRS 3863

#### CRS 3865 Doctoral Internship VI

Continuation of CRS 3864

# **Department Faculty**

3 QH

3 QH each

3 QH

3 QH

3 QH

**Carmen Armengol**, PhD, Pennsylvania State University Dr. Armengol is a practicing neuropsychologist with particular interest in assessment and multicultural issues.

Mary B. Ballou, PhD, ABPP, Kent State University Dr. Ballou's research focuses on crisis intervention and developing a feminist orientation to psychology. She is coauthor of *A Feminist Approach to Mental Health and Health Counseling*.

### M. Patricia Fetter, PhD, Syracuse University

Dr. Fetter's research interests include human sexuality and family dynamics, health counseling, and mental health, with an emphasis on communication skills.

# Deborah Greenwald, PhD, University of Michigan

Dr. Greenwald's main academic interests include psychological assessment, family style, and personality functioning. She has conducted research on high-risk families.

# Thomas F. Harrington, PhD, Purdue University

Dr. Harrington's research involves occupational interests. He is the co-author of the "Harrington-O'Shea Decision-Making System" and of the *Guide to Occupational Exploration*.

# Louis Kruger, PsyD, Rutgers University

Dr. Kruger is the editor of the book *Promoting Success with At-Risk Students*, associate editor of the international journal *Special Services in the Schools*, and a contributor of articles to several journals, including *Psychology in the Schools*.

#### Louise LaFontaine, EdD, Boston University

Dr. LaFontaine's academic interests include normalization and deinstitutionalization for the severely handicapped, as well as program development and bilingual special education.

Chieh Li, EdD, University of Massachusetts at Amherst Dr. Li's particular and scholarly interests are in multicultural areas, with particular reference to Asian American families and creativity.

### Karin Lifter, PhD, Columbia University

Dr. Lifter's primary academic interests are the applications of developmental psychology to both the assessment of and early intervention with special needs children.

# **Lawrence Litwack**, EdD, ABPP, Boston University (Chairperson)

Dr. Litwack is the author of *Using Guidance Skills in the Classroom* and *Health Counseling*. He is a nationally recognized expert in reality therapy and editor of the *Journal of Reality Therapy*.

**Emanuel J. Mason**, PhD, Temple University Among Dr. Mason's research and academic interests are statistics, research design, and affirmative action.

**Barbara Okun,** PhD, Northwestern University Dr. Okun has authored many books, including *Family Therapy* with School-Related Problems and Effective Helping: Interviewing and Counseling Techniques.

William G. Quill, EdD, University of Massachusetts at Amherst

Dr. Quill's academic interests include theoretical and historical psychology, philosophy of mind, epistemology and metaphysics, and philosophy of science.

William Sanchez, PhD, Boston University

Dr. Sanchez has extensive experience in assessing and counseling children in urban areas. He is a former director of the Hispanic Psychiatry Team at Boston's Children's Hospital.

James F. Scorzelli, PhD, University of Wisconsin Professor Scorzelli has focused his research on rehabilitation counselor training and chemical dependency. He has authored articles in several journals.

**Ena Vazquez-Nuttall,** EdD, Boston University (Associate Dean of the Graduate School)

Dr. Nuttall is the author of the recently published book *Assessing and Screening Preschoolers*. She has published widely in the areas of psychological assessment, Hispanic families and children, cross-cultural issues, and women.

# **Application Process**

All documents submitted as part of the application process must be originals, including official English-language transcripts of all previous undergraduate and graduate course work. Students who have attended institutions outside the United States must provide comparable certified transcripts in English. Sealed letters of recommendation completed by three people acquainted with the applicant and sealed transcripts must be included in the admission packet. A complete application consists of the following:

- · completed application form;
- three sealed letters of recommendation;
- non-refundable application fee (check or money order drawn on a U.S. bank payable to Northeastern University);
- official transcripts in English from each college or university attended;
- · data-processing sheet;
- · essay describing goals and expectations;
- TOEFL scores for international applicants who do not hold undergraduate or graduate degrees from U.S. institutions, and whose native language is not English;
- declaration and Certification of Finances form (international applicants only).
- Test scores are required as follows:
  - MS Graduate Record Exam (GRE) or Miller Analogies Test (MAT) within past five years. Note: MS applicants for Biomedical Sciences or Master of Health Professions are not required to submit GRE or MAT scores;
  - CAGS Graduate Record Exam (GRE) *or* Miller Analogies Test (MAT) within past five years;
  - PhD Graduate Record Exam (GRE) within past five years. Note: Applicants to the PhD program in Biomedical Science who have received their MS degree may waive the entrance exam requirement. At its discretion, the Biomedical Sciences Graduate Committee may drop a student from thedoctoral program if the results of the doctoral entrance examination reveal deficiencies too great to be removed within one year.

#### **Application Deadlines**

For Master's programs and Certificate of Advanced Graduate Studies Programs, completed applications must be received by at least one month prior to registration for the upcoming quarter. Programs with deadlines are as follows. (Please submit completed applications as early as possible.)

• School and Counseling Psychology (PhD): February 1st for admission the following fall.

#### **Financial Information**

### BILLING

Tuition statements are mailed to students by the Bursar's Office. The Bursar's Office is responsible for processing most of the financial transactions, maintaining accounts, and sending payment notices.

### **PAYMENT**

Full payment of tuition and other related charges are due by the beginning of each quarter. The following are accepted methods of payment:

- check or money order made payable to Northeastern University;
- Mastercard, Visa, or Discover (payments may be made in person or by calling our twenty-four hour automated charge line: 617-373-2319 or 1-800-937-4067);
- enrollment in the Three Payment Option Plan described below.

Students are responsible for the prompt payment of all bills. If a bill has not been received by the first week of the quarter, please go to the Bursar's Office where a bill will be created for you.

Any discrepancies in your bill should be brought to the attention of the Bursar's Office. If there is a billing problem, pay the undisputed portion of the bill to avoid any additional late fees.

#### THREE PAYMENT OPTION

Northeastern University offers a three payment option plan. Information regarding this plan may be obtained at the Bursar's Office, (617) 373-2270. There is a nominal fee for participation in this program.

## TUITION PAID FOR BY EMPLOYERS

Many companies reimburse the student/employee upon successful completion of courses. In these situations the student is responsible for the payment of the bill at the beginning of the quarter or may select to use the Three Payment Option Plan. **Tuition may not be left unpaid pending reimbursement by employer.** Failure to make payments in accordance with these regulations will result in a late payment fee.

The student must provide the Bursar's Office with a purchase order or a statement from an officer of the company certifying that the company will pay the University directly. If there are stipulations associated with the payment agreement, such as a minimum grade level, then the student must either pay the University directly or enroll in the Three Payment Option Plan.

# TUITION AND FEE POLICY

Tuition rates, all fees, rules and regulations, and courses and course content are subject to revision by the president and the Board of Trustees at any time.

#### REFUNOS

Tuition refunds may be granted through the first four weeks of a quarter on the basis of the date appearing on the official withdrawal application filed with the Registrar's Office. Non-attendance does not constitute official withdrawal.

Credit balances will be applied to future charges unless the Bursar's Office receives other written instructions. Refunds will be credited according to following schedule:

Official Withdrawal Filed	Percentage of Tuition Refunded
Within	
First week of quarter	100%
Second week of quarter	75%
Third week of quarter	50%
Fourth week of quarter	25%
Fifth week of quarter or later	0%

A different refund schedule may apply to courses that run less than a full quarter.

#### DELINQUENT BALANCES

In cases of student default on tuition payments, the student is liable for the outstanding tuition, as well as all reasonable collection costs and any legal fees incurred by the University during the collection process.

Transcripts and other academic records will not be released until all financial obligations to the University have been met.

## HEALTH SERVICE WAIVER PROCESS

The University provides hospital insurance for all students who have matriculated, are carrying a course load of nine credits or more, or who are in a full-time program. This program is mandated by the Commonwealth of Massachusetts. Students will be enrolled automatically in the University's plan, and the fee will be charged to their Northeastern account.

Students who are covered under a comparable hospital insurance plan may waive the University-offered insurance program by filing a waiver available at the Bursar's Office. Forms must be filed with the Bursar's Office, 254 Richards Hall, (617) 373-2270, by the deadline dates.

Waivers submitted after the deadline will not receive a full reversal of the Health Fee.

#### FINANCIAL ASSISTANCE

#### **Graduate Assistantships**

Assistantships are available to Bouvé College of Pharmacy and Health Sciences graduate students in academic and administrative departments throughout the University. Assistantship applications are available from the Graduate School Office in 203 Mugar Life Sciences Building. The types of assistantships available are stipended graduate assistantships and tuition assistantships. The tuition and stipend benefits for all assistantships may change yearly. For further information regarding terms of employment, refer to the Northeastern University Undergraduate and Graduate Handbooks.

Northeastern University, which is a member of the Council of Graduate Schools of the United States, subscribes to the following resolution of the Council: Acceptance of an offer of financial aid (such as graduate scholarship, fellowship, traineeship, or assistantship) for the next academic year by an actual or prospective graduate student completes an agreement that both student and graduate school expect to honor. In those instances in which the student accepts the offer before April 15 and subsequently desires to withdraw, the student may submit in writing a resignation of the appointment at any time through April 15. However, an acceptance given or left in force after April 15 commits the student to refuse another offer unless first obtaining a written release from the institution to which a commitment has been made. Similarly, an offer by an institution after April 15 is conditional on presentation by the student of the written release from any previously accepted offer.

# Stipended Graduate Assistantship Awards

The stipended graduate assistantship award requires a work commitment of twenty hours per week and offers non-taxable tuition remission as well as a taxable cash stipend. Students are required to be enrolled in a minimum of six quarter hours or continuation.

## Tuition Assistantship Awards

The tuition assistantship award requires a work commitment of ten hours per week and offers a taxable tuition remission. Students are required to be enrolled in a minimum of eight quarter hours or continuation.

#### Residence Hall Staff Positions

A limited number of residence staff positions in housing facilities are available each year. Appointments carry minimum compensation of room and board. Further information may be obtained from the Residential Life Office, 4 Speare Hall. Students are required to be enrolled in a minimum of six quarter hours or continuation.

## FEDERAL, CAMPUS-BASED AID AND ALTERNATIVE BORROWING

The Office of Financial Aid provides a full range of financial assistance for graduate students. In addition to determining the programs for which students are eligible, the office also provides information and applications for alternative loan programs.

The Office of Financial Aid offers several types of aid to assist graduate students. All awards are based on financial need/eligibility and the amount of aid granted is dependent upon the amount of funds allocated to Northeastern University each year. However, the University cannot guarantee aid to all who apply nor meet the entire need of every student. Therefore, students should work out a plan to meet their financial obligations before the academic year begins. The following are requirements for financial aid eligibility:

- U.S. citizen or eligible permanent resident;
- · documented financial need;
- timely financial aid application with proper application forms;
- acceptance in an eligible degree or certificate program on at least a half-time basis (six quarter hours) and making satisfactory academic progress;
- meet all other eligibility requirements for the individual aid programs.

Graduate students are required to submit a Free Application for Federal Student Aid (FAFSA) form to the College Scholarship Service and submit to the University a Northeastern University Graduate Application for Financial Aid and financial aid transcripts (FATs) from all post-secondary schools attended. For priority consideration, financial aid forms are due by the March 1 that precedes the academic year.

All financial aid application forms are available at the Graduate/Law Office of Financial Aid, 410 Richards Hall, Northeastern University, Boston, MA 02115.

#### Perkins Loans

This program is available to full-time graduate students who show a high level of financial need. Graduate students may borrow up to \$30,000 during the course of their entire educational careers. Repayment and interest will begin six months after the student graduates or ceases to carry a half-time academic load (six quarter hours). Repayment may be extended over a ten-year period with an interest rate of five percent per annum. No payments are required for up to three years while a borrower is serving in the Armed Forces, Peace Corps, or VISTA, or while he or she is working as a full-time volunteer for a tax-exempt charitable organization performing service comparable to the service performed in the Peace Corps or VISTA.

## Stafford Student Loan Program

Under this program, students who demonstrate financial need, in accordance with guidelines established by the U.S. Department of Education, may borrow money for educational expenses from banks or other private lending institutions. Financial need is determined by the Office of Financial Aid at Northeastern on the basis of information provided on the Financial Aid Forms. To be eligible for federally funded loans, students must also be enrolled in a degree-granting program on at least a half-time basis (six quarter hours). Information on specific terms, conditions, fees, and repayment, as well as

application forms may be obtained from lending institutions and state guarantee agencies. You may also contact the Office of Financial Aid at Northeastern University.

Please note: Students must receive a financial aid award letter from the Office of Financial Aid before submitting the Stafford application forms to the Student Loan Office at Northeastern.

#### College Work-Study Program

This program is available to full-time graduate students who show financial need. It is designed to give students an opportunity to earn as much as \$8 per hour working in jobs on or off campus in public or private nonprofit organizations. This program is administered solely by the Office of Financial Aid and should not be confused with the University's Cooperative Education Program.

#### **Scholarships**

Provost Minority Fellowships and Supplement

The Minority Fellowships assist a limited number of minority students accepted for full-time study in the graduate schools of the University. The awards consist of tuition remission ranging from \$4000 – \$8000 and are made to students who demonstrate superior academic achievement. The Minority Supplement consists of a \$5000 cash supplement that is given to doctoral students who have been awarded a NUTA. Both awards are given on merit and do **not** require the student to work.

### Martin Luther King, Jr. Scholarships

A limited number of full-time Martin Luther King, Jr. Scholarships are available. These scholarships pay the recipient's full tuition and fees during the course of satisfactory graduate work. Further information and applications are available from the African American Institute, Northeastern University, 40 Leon Street, Boston, Massachusetts 02115.

#### **FURTHER INFORMATION**

The following numbers are listed for your convenience so that you may contact these offices for further information:

Bursar's Office	1-617-373-2270
Automated Charge Card System	1-800-937-4067
Office of Financial Aid for the Graduate Schools	1-617-373-5899
Registrar's Office	1-617-373-2300
Residential Life	1-617-373-2814
Student Loans	1-617-373-3386
University Food Service	1-617-373-2481

# **Student Status and Registration**

### ACCEPTANCE AND REGISTRATION

Applicants may be accepted as regular, provisional, or conditional students and must confirm acceptance within the period designated in the acceptance letter.

Students will be assigned an advisor from their program and must confer with the advisor regarding an approved program of studies and course selection prior to registration. Registration is required for all courses, and entry is granted on a first-come, first-served basis.

## IMMUNIZATION REQUIREMENTS

All full-time students and part-time health science majors of any age must comply with the State Immunization Law. Questions regarding meeting immunization requirements should be directed to Lane Health Center (617) 373-2772.

Full-time and part-time students are required to provide documentation of the following:

- measles/rubeola two immunizations or positive measles/rubeola titre;
- mumps immunization or positive mumps titre;
- rubeola/German measles immunization or positive rubeola/German measles titre;
- tetanus/diptheria immunization within the last ten years.

Students with clinical rotations are required to provide documentation of the following:

- measles/rubeola two immunizations or positive measles/rubeola titre;
- mumps immunization or positive mumps titre;
- rubella/German measles immunization or positive rubella/German measles titre;
- tetanus/diptheria immunization within the last ten years;
- varicella/chicken pox titre only;
- PPD/mantoux current negative result within six months of registration and annually each September thereafter or X-ray and treatment report required if positive PPD;
- hepatitis B hepatitis B series and/or positive titre.

If you fail to submit this documentation to Lane Health Center you will be notified that you have a block on your registration for the upcoming quarter. Failure to clear this block will result in having your courses deleted and being prevented from re-registering for classes until the block is cleared. Do not assume your block has been cleared if you have submitted the required information when you were notified of a health block. Please call Lane Health Center at (617) 373-2772 to verify that your block has been cleared.

#### STUDENT CLASSIFICATION

Student classifications are special student status, provisional student status, full-time status, doctoral candidate, and doctoral degree candidate.

#### **Special Student Status**

Students who are not pursuing a specific degree program are classified as special students. Granting of special student status does not commit the graduate school in any way regarding future admission. Special students may take no more than two courses per quarter and should maintain a B (3.0) average to be able to continue taking subsequent classes.

Students may take a maximum of four three-credit courses that they may later apply to a degree or non degree program, provided the courses are applicable. Whether such credits are allowed will not influence the number of external transfer credits allowed.

Special students may be considered for degree programs only after submission of a complete application package. The special student fee will be applied to a later application to a degree or non-degree program within the College.

#### **Provisional Student Status**

Provisional acceptance refers to students allowed to register for a total of *twelve quarter hours* of course work for which they must maintain a 3.0 average. If these conditions are met, the student will be allowed to continue as a regular student. Conditional acceptance refers to students whose acceptance is conditional upon satisfactory completion of specified prerequisite courses. It is also used in cases of students whose previous academic record is not in the program content area or is not as strong as we would like.

# Full-Time Student Status

Graduate students are considered full time if enrolled in a minimum of four courses or nine quarter hours of credit for the quarter with the following exceptions:

- Students for whom English is a second language, at the
  discretion of their department, will be considered full time
  if they are enrolled in a minimum of three courses or are
  carrying eight quarter hours of credit.
- Students who hold Stipended Graduate Assistantships will be considered full-time if enrolled for a minimum of six quarter hours of credit.
- Students who hold Northeastern University Tuition Assistantships (NUTA) will be considered full time if enrolled in a minimum of eight quarter hours of credit.
- Students enrolled in doctoral research are considered full time.
- Students who are in continuation status may be considered full-time at the discretion of their departments. It is ordinarily assumed that such students will be in residence, but exceptions are allowed.
- Students who are engaged in a "practicum" experience as part of their degree requirements may be considered full time at the discretion of their departments.
- Students for whom a full load is not offered in a given quarter must submit a letter from their advisor to the director of the graduate school requesting to be considered full time.

If you have questions regarding meeting full-time status requirements for financial aid purposes, please contact the Office of Financial Aid. It is possible for a student to be considered full time by the University and not be considered full time according to financial aid requirements.

#### **Doctoral Student**

Students who have been admitted to a doctoral program.

#### **Doctoral Degree Candidate**

Students in this classification have completed forty quarter hours of acceptable graduate work beyond the Bachelor's degree or have received a Master's degree in the same or related field from an accredited college or university and have passed the qualifying examination(s). Individual departments may have additional requirements.

#### PROGRAM ADVISEMENT

When students are accepted as a full-time or part-time student, they are assigned a faculty advisor who will help them plan their program of study. The faculty advisor and the student should complete the Approved Program of Study Form during the first academic quarter.

The advisor/student relationship provides a structure for the development of a close professional relationship with at least one member of the faculty. Advisors take a particular interest in their advisees' learning and professional development. Their primary relationship with the student allows for discussions about professional development, research ideas, clinical placements, and future roles as well as current course work, exams, and annual evaluations (if applicable).

Students are also encouraged to develop relationships with other faculty members to collaborate on research and academic projects.

#### REGISTRATION

The University operates on an academic quarter system. Graduate programs are scheduled on a three-and-one-half-quarter basis each year. The Fall Quarter usually begins in mid September and continues to mid December. The Winter Quarter begins the first week of January and ends the second week in March. The Spring Quarter begins the last week of March and ends the first week in June. The Summer Quarter begins mid June and ends the last week of August. Please note that this time frame may vary from one academic year to the next. Typically, graduate classes meet once a week, usually for two and one-half hours except in the six-week Summer Quarter, when they meet twice a week, two and one-half hours per meeting.

#### Registering for Classes

Sequencing of courses varies somewhat for individual students, depending upon the number of prerequisite courses needed. The program of study developed by the student and the faculty advisor will guide the student in course selection. Certain courses are offered on an alternate-year basis. Notification of tentative course schedules are available in the Graduate Office (203 Mugar).

Students are strongly urged to preregister by phone (617-373-8000) to help ensure getting into courses with limited enrollments. Students may pick up preregistration materials approximately four to six weeks prior to the start of the quarter. Typically, open registration occurs approximately two weeks prior to the start of the quarter. Late registration is possible during the first week of classes.

#### Insufficient Enrollment Disclaimer

Northeastern University reserves the right to cancel any course if minimum enrollments, appropriate faculty, or academic facilities are unavailable to meet standards.

## Withdrawal from Classes

Ceasing to attend class or notifying the instructor does not constitute official withdrawal. Withdrawal or Drop Forms are available in the Registrar's Office at 120 Hayden Hall. If a student withdraws from a course prior to the sixth week of the quarter, the course will not be reflected on the transcript. If a student withdraws from a course between the sixth week and the ninth week of the quarter, a grade of 'W' will be recorded on the transcript.

No withdrawals are processed after the ninth week of the quarter.

#### **Transcripts**

Official transcripts may be obtained at 117 Hayden Hall. To obtain an official transcript, the student must have a receipt from the Bursar's Office and student identification.

An *unofficial* transcript may be obtained at any kiosk on campus.

# **General Academic Requirements**

Students are expected to maintain a minimum grade point average of B (3.0) in all course work; only two courses of additional course work, including repeated courses, may be allowed to satisfy the B (3.0) average required for the degree. Students who receive a grade of F or U in a course may make up the course according to their adviser's recommendation; however, students are not permitted to repeat a course more than once.

#### COURSE CREDITS

#### **Time Limitations**

Course credits earned in the Graduate School or accepted for transfer in the Master's and CAGS programs are valid for a maximum of seven years between the time taken and the completion of degree requirements, unless the Graduate Committee grants an extension. In order to obtain an extension the student must submit a General Petition Form to the Graduate Committee of his/her program explaining the need for an extension and the expected date of completion, along with a recommendation from the faculty member. This petition, along with a letter of support from the Department, is sent to the Director of the Graduate School for final approval.

#### **Transfer Credit**

A maximum of twelve quarter hours of credit obtained at another institution may be accepted as transfer credit. Transfer credits must be recommended for transfer by the student's adviser, must consist of work taken at the graduate level for graduate credit at an accredited institution, must carry an earned grade of B (3.0) or better, and must not have been applied toward any other degree. Credit can not be granted in excess of the equivalent Northeastern University course. If the course is an elective and there is not an equivalent course, the semesterhour equivalent will be granted. Grades received for transfer credits will not be reflected in the student's overall G.P.A. and may not be used to obtain the academic average necessary for the completion of degree requirements. No more than four graduate credits may be assigned to upper-level undergraduate coursework to meet the minimum of forty post-baccalaureate credits required for the Master's degree. Under no circumstances will lower-level undergraduate course work be accepted to meet the minimum of forty post-baccalaureate credits required for the Master's degree.

Students seeking transfer credit should petition the Graduate School by submitting a completed Petition to Revise the Program of Studies Form to the Graduate Office, 203 Mugar. The completed form must be submitted to the Associate Dean of the Graduate School, together with an official transcript and excerpt from the catalog describing the course for which credit is requested. No transfer credit request form will be considered without the signature of the student's advisor as well as an official transcript. Students are informed in writing when transfer credit is awarded.

#### **Course Waivers**

The purpose of the waiver process is: 1) to minimize the possibility that a student will be required to complete courses that are equivalent to previous educational or professional experience; and 2) to ensure that students have attained proficiency in the content areas encompassed by the proposed waived course. Any course waived must be replaced by an approved elective.

Procedural guidelines:

- Confer with your faculty advisor. If both parties agree that substantial equivalency might exist between the student's previous educational or professional experience, those courses should be identified.
- Students are strongly advised to submit all waiver applications prior to the end of the Fall Quarter of their first year.
- Each waiver application must include a graduate school waiver form (available in the Graduate Office, 203 Mugar), a copy of the official transcript that includes the course considered to be equivalent, and a syllabus of the course. If required for certification, an ICC waiver must also be attached.
- The following courses require additional documentation in the form of a case report: CRS3335 — Individual Intelligence Testing; CRS3341 — Psychodiagnostic Measures; and CRS3340 — Rorschach. The case report should demonstrate competence in the assessment processes and/or instruments addressed by the course.

#### RESIDENCE REQUIREMENTS

All coursework for advanced degrees must be registered for and completed within the College of the University unless the Graduate Committee of the program has granted approval of work taken elsewhere.

Candidates for the PhD in Biomedical Science degree must spend the equivalent of at least one academic year in residence at the University taking graduate work. The Graduate Committee of the program specifies the method of satisfying the residence requirement, which must be satisfied *after* the student has been admitted to *degree candidacy*. Time spent in residence as a doctoral student may not be used to meet the doctoral degree residence requirement.

Candidates for the PhD in School and Counseling Psychology are required a minimum of two years full-time residency.

#### Clinical Requirements

- The Clinical Exercise Physiology Program requires students to maintain a minimum grade of B (3.0) in clinical work.
- The Counseling Psychology, Rehabilitation, and Special Education faculty evaluates student's professional competence, ethical behavior, interpersonal skills, and general adjustment. Students must maintain a satisfactory level of performance in these areas in order to continue in the program.

- The Physician Assistant Program gives grades for each clinical rotation (applied study); a grade below C (2.0) is not acceptable. The clinical grade includes a review of the student's academic performance as well as an assessment of professional conduct by the clinical preceptor at each site. If a student fails a rotation, repetition will be at the discretion of the instructor and program director. Satisfactory completion of all rotations is required for graduation.
- The Speech-Language Pathology and Audiology Program requires students to maintain a minimum grade of B (3.0) in clinical work.

#### SPECIAL AND ADDITIONAL REQUIREMENTS

Each program has its own particular degree requirements. Please refer to individual program descriptions for additional degree requirements.

# COMPREHENSIVE EXAMINATION/THESIS/DISSERTATION REQUIREMENTS

Students are responsible for verifying applicable requirements, such as comprehensive examinations, thesis, and dissertation, with the adviser for the relevant degree program. The requirement should be noted on your program of studies.

#### ADDITIONAL PROGRAM INFORMATION

Additional program publications are prepared for the following programs and further explain specific program requirements:

- · School and Counseling Psychology Doctoral Handbook
- Applied Educational Psychology, School Psychology Student Handbook

#### CONTINUITY OF PROGRAMS

Students are expected to maintain continuous progress toward a degree. Those who have not attended classes for one year may be required to apply for readmission.

#### GRADING SYSTEM

Note: Individual faculty members may choose not to use the plus and minus designations. If they elect to use whole letters only, they must announce this to the class at the beginning of the quarter.

- A (4.0), A- (3.667): These grades are given to students whose performance has been of very high graduate caliber
- **B+**(3.333), B (3.0): These grades are given to students whose performance has been at a satisfactory level.
- **B-** (2.667), C+ (2.333), C (2.0), C- (1.667): These grades are given to students whose performance has been below the level expected in graduate work.
- F (0): This grade is given to students whose performance in the course has been below the level expected in graduate work.
- Incomplete, without quality designation. This grade may be given to students who fail to complete the work of the course.
- L: Audit without credit.
- S: Satisfactory, without quality designation.
- U: Unsatisfactory, without quality designation.
- W: Withdrawal after the fifth week of classes recorded on the permanent record.

#### **Incomplete Course Grades**

An incomplete (I) grade will be changed to a letter grade when the deficiency that led to the l is corrected to the satisfaction of and in the manner prescribed by the instructor of the course. The period for clearing a grade of I will be restricted to one calendar year from the date of its first having been recorded on the student's permanent record.

#### ACADEMIC WITHDRAWALS

Academic withdrawals from the college are made by the Graduate Director when students fail to meet the academic requirements.

### CHANGES IN REQUIREMENTS

Changes in curricula may occur as part of the ongoing review and development of programs. When no hardship is imposed on students because of changes, and when facilities of the school permit, students are expected to meet requirements of any curriculum changes. Any departure from procedure, such as transfer credit, course substitution, or program change, requires a petition.

## DELIVERY OF SERVICES

Northeastern University assumes no liability for delay or failure to provide educational or other services or facilities due to causes beyond its reasonable control. Causes include, without limitation, power failure, fire, strikes by university employees or others, damage by natural elements, and acts of public authorities. The University will, however, exert reasonable efforts, when it judges them to be appropriate, to provide comparable services, facilities, or performance; but its inability or failure to do so shall not subject the University to liability.

## **Academic Integrity Policy and Rules of Conduct**

Bouvé College of Pharmacy and Health Science assumes that all students come to the College for a serious purpose and expects them to be responsible individuals who demand of themselves high standards of academic integrity. Bouvé College of Pharmacy and Health Science will not condone academic dishonesty in any form. For Northeastern University Regulations and Code of Conduct, refer to the Undergraduate and Graduate Student Handbook.

Academic dishonesty includes, but is not necessarily limited to, the following:

- cheating giving or receiving unauthorized assistance in any academic exercise or examination. Using or attempting to use any unauthorized materials, information, or study aids in an examination or academic exercise.
- plagiarism representing the ideas or language of others as one's own.
- falsification falsifying or inventing any information, data, or citation in an academic exercise or in application materials
- multiple submission submitting substantially the same written work to more than one instructor without the knowledge and permission of the instructors involved.
- **compliancy** facilitating any of the above actions or performing work which a fellow student then presents as his or her own.
- interference interfering with the ability of a fellow student to perform his or her assignments.

Refer to the Northeastern University Undergraduate and Graduate Student Handbook for all rules, regulations, and policy statements with respect to standards of student conduct.

## DISABILITY RESOURCE CENTER

The Disability Resource Center provides a variety of disability-related services and accommodations to Northeastern University's students and employees with disabilities.

Northeastern University's compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are coordinated by the Dean and Director of the Disability Resource Center. Persons requiring information regarding the Disability Resource Center should contact Dean G. Ruth Bork at 617-373-2675 (voice) or 617-373-2730 (TTY).

#### EQUAL OPPORTUNITY POLICY

Northeastern University is an equal opportunity/affirmative action educational institution and employer.

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# **Graduate School**

Bouvé College of Pharmacy and Health Sciences Northeastern University 203 Mugar Building Boston, MA 02115

(617) 373-2708